SOUTHERN ASSOCIATION QUA Volume VII AUGUST, 1943 Number Some Phases of the Work in Southern Association Study Schools Foreword At the annual meeting of the Southern Association held in Memphis, Tennessee, December, 1942, a special committee on publications presented to the Executive Committee of the Commission on Curricular Problems and Research the following recommendations: **Publication Policies** The Committee recommends: 1. That a committee on publications be set up responsible to the Commission through the Executive Committee for reviewing and passing upon publications authorized by the Executive Committee within the limits of policies established by the Commission; 2. That the committee on publications encourage individual teachers and schools to publish reports of educational interest and value through availabel channels;

- That the committee on publications cooperate with institutions in promoting studies and publishing materials deemed to be of value in the improvement of education:
- 4. That the Director of the Southern Association Study, acting under the direction and advice of the committee on publications, shall be responsible for the preparation of reports authorized for publication by the Exceutive Committee of the Commission.

B. Publications

1. The committee recommends that the newly prepared monograph entitled, "Some Evidences of Pupil Achievement in the Southern Association Study," be submitted for publication in the Association Quarterly and such reprints be made as seem desirable, or that the monograph be printed in such other manner as seems desirable.

2. The committee recommends that the following additional publications be

issued in the order suggested and at as early dates as seem feasible:

a. The publication, separately or collectively, of the record of work in from

1/4 to 1/3 of the Southern Study schools (The schools chosen are to be representative of the various types of schools in the Study);

b. Types of instructional procedure developed in schools of the Southern Association Study (See page 196, SOUTHERN ASSOCIATION QUARTERLY, February, 1942);

c. Some aspects of school and community relationships in the Southern

Association Study;

^{*} These reports from teachers and principals of five secondary schools in the Southern Association Study were selected and prepared for publication by Dr. Frank C. Jenkins, Director of the Southern Association Study in Secondary Schools.

d. Implications of the Southern Association Study for teacher education (See reference under b above);

e. A summary report on the Southern Association Study.

The committee recommends that the content and organization of the first four publications (a, b, c, d) recommended should be primarily directed to aiding teachers, principals, and teacher training departments in building programs of instruction which will meet the needs of the communities served by the schools.

These recommendations were approved.

The monograph, "Some Evidences of Pupil Achievement in the Southern Association Study," appeared in the May issue of the QUARTERLY and reprints were made available for distribution. Pending the establishment of permanent headquarters of the Commission, these may be secured through Dr. Roscoe E. Parker, University of Tennessee, Knoxville, Tennessee, Secretary of the Commission on Curricular Problems and Research.

Publications of the work in three of the secondary schools participating in the Southern Study have been issued and distributed to secondary schools and colleges in the South. State high school supervisors have been most helpful in the distribution of these materials. The reports that have appeared are The Parker District High School and the Parker District Community, An Account of the Work of the Waynesboro High School in the Southern Association Study, and A Study of Lafayette and Other Fayette County Schools.

I. School Procedures

Individual teachers in secondary schools in the South participating directly or indirectly in the Southern Association Study have been encouraged to keep a detailed record of work that they have done and to write a description of what has been done with respect to some particular aspect of their work. Some of the teachers have made dilligent efforts to encourage high school students to understand better the purposes of their school work. to take a more active part in immediate and long-range plans, and to accept responsibility and carry it out. They are continuing to work in this way and to keep a record of their successes and failures. The papers that they have prepared and submitted somewhat reluctantly for publication should not be considered in any sense as conclusive evidence of a knowledge and practice of best instructional procedures. On the other hand, they represent a willingness on the part of teachers interested in the improvement of instruction to indicate the direction in which they are working in the hope that they may receive suggestions from other teachers and that what they are going may be helpful to others in thinking through their instructional problems.

The following papers with the names of the teachers preparing them appear in this issue of the QUARTERLY:

"A Description of Attempts to Meet the Mathematical Needs of High

School Pupils," by Miss Gladys Espy, Moultrie High School, Moultrie, Georgia.

"Working With Students on Their Needs and Interests," by Miss Vinnie Lee Walker, Montevallo High School, Montevallo, Alabama.

"A Description of a Teacher's Work With Tenth Grade Pupils in English-Social Science," by Miss Sarah Rogers, Frankfort High School, Frankfort, Kentucky.

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A Description of Attempts to Meet the Mathematical Needs of High School Rupils

By GLADYS ESPY
Teacher, Moultrie High School, Moultrie, Georgia - High School

The administration and teachers in the Moultrie High School believe that the justification for spending public money on education is adequate preparation for effective living. Acceptance of this belief by many teachers was contributed to by the admission of children from rural schools. This was done in 1925 and the school program was slowly modified to make provision for them.

There was in our school at that time something of the philosophy that each pupil should be treated as an individual who is to have a responsible place in this world and a place for which the high school should help him prepare. But the faculty was so bound by the existing system of courses and credits that for several years all we, as mathematics teachers, were able to do was to group the students as nearly as possible in accordance with academic ability, teach the courses on different levels, and strive throughout to stress such fundamentals as the use of equations and logical reasoning hoping that there would be some useful carry-over of these skills into the day-to-day living of the pupils. Perhaps that was a forlorn hope, but it was all we had.

For many years mathematics was taught by teachers who seemed certain that the ability to write out on the blackboard and glibly recite the proof of the theorem, "The square on the hypotenuse of a right triangle is equal to the sum of the squares on the other two sides," was a necessary part of good geometry teaching. Most of us taught our classes in algebra and geometry as we had been taught, and many hours of boredom resulted for for our pupils who were compelled to sit quietly and appear interested in explanations of the board work of other pupils. We assumed, if we thought at all about the purposes we had in teaching mathematics, that if our pupils could solve the algebra problems and memorize and repeat the theorems in geometry there must of necessity be a transfer of applicable skills to the

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Mathematic Teaching problems they were meeting then and would meet later. And in addition to this assumption we had the support of the traditional idea handed down for generations that mathematics had great disciplinary values for all pupils who took it.

However, most teachers were sooner or later confronted with the question in an algebra or geometry class—an honest question from a boy's practical mind—"What good will this do me?" And even as they were attempting to get their pupils to figure out how many jumps it took the dog to catch the rabbit, they themselves had honest doubts as to any practical value involved. These honest doubts, the stir in the educational field some ten years ago over the futility of mathematics as it was then taught, and large failure lists in formal mathematics classes led the principal and the mathematics teachers of Moultrie High School to wonder if the mathematics courses and teaching procedures could not be changed so as to meet more nearly the needs of our pupils.

Through a period of years the mathematics teachers have helped formulate the philosophy of our school—that each pupil should be treated as an individual who is to have a place in this world for which the high school should help him to prepare—and have attempted to translate this philosophy into an action program for the mathematics department. Over a period of years these teachers have evolved and based their actions on the following assumptions: (1) that most eighth grade pupils are too young to receive much benefit from a formal algebra course and that they would get more mathematical experiences of meaning in their daily living from a course in general mathematics properly taught; (2) that pupils who do not plan to go to college need more knowledge of the mathematics involved in everyday living than they now gain in the first eight grades of school; (3) that geometry, if taught as a group of theorems in a certain prescribed order whose proofs are to be memorized, is painful to fully half of the pupils, promptly forgotten by most of them, and hence is of little value; (4) that pupils who plan to go to college should be given the formal mathematics needed to enable them to meet the requirements of the college they have chosen; (5) that today boys and girls need a knowledge of the fundamentals of mathematics more than ever before.

Our present mathematics curriculum was not born full grown. It was not until 1933, nearly ten years after we became conscious of a need for change, that we made our first definite effort to change the mathematics courses. At this time we replaced algebra in the eighth grade with a course in general mathematics. At the same time algebra in the ninth, plane geometry in the tenth, algebra and solid geometry in the eleventh grade were made electives, no longer required of all pupils.

Since the majority of our rural pupils entered the tenth grade and did not elect algebra and geometry, they thus got no mathematics at all except

the small amount they had studied in the seven-months, rural elementary schools of the county. Soon these, and other pupils, began to feel a need and to express a desire for more mathematics; so in the fall of 1938 a course in practical mathematics was offered as an elective to tenth and eleventh grade pupil's who did not plan to go to college.

Subsequent changes in our mathematics course offerings were brought about by two factors. The first was that, in a survey made by high school faculty members two years ago, business men of our community told us that boys and girls applying for jobs did not know enough simple arithmetic. We believed that the reason for this was that these pupils were not having any arithmetic after they were old enough really to understand it. The second factor which brought about change in course offerings was that the pupils and teachers realized that most of the formal algebra which the pupils learned in the ninth grade was forgotten before they entered the eleventh grade algebra classes. With these facts in mind, in the fall of 1940, we changed our ninth grade mathematics from formal algebra to general mathematics and required all ninth grade pupils to take it. Thus, rather than giving less mathematics then before, we are now requiring more mathematics, for we feel that in this world of today every boy and girls needs more knowledge of mathematics than ever before, though it may be of a different type from that taught in high schools of twenty years ago.

Not only the course offerings, but their content and the methods used in our teaching have gradually undergone changes, particularly during the past few years. All of the mathematics teachers meet together periodically to study and discuss the work we are doing. We seek to define the outcomes we wish for our pupils and the best ways to accomplish them. We search for better ways of teaching. We borrow sets of textbooks from each other needed for work on special topics. All of us try to see the school program as a whole and to plan the mathematics program for the entire four years so that each pupil will get a variety of mathematical experiences with enough repetition to insure mastery.

In grade-group meetings of faculty members the mathematics teachers keep in close touch with the experiences the pupils are having in their other classes and plan the mathematics program to aid as much as possible the work in the other departments. For example, the teacher of the eighth grade general mathematics meets with all of the teachers of eighth grade pupils once each week. In these meetings the science teacher may ask that scale drawing be taught to the eighth grade pupils in order that they may make their models in the science room when they study "The Universe." The home economics teachers may ask that their pupils be taught and given practice in changing recipes before they begin their cooking classes. Recently, the pupils were taught in the mathematics classes a way of analyzing problems which was used in the First Aid classes. The teacher of chemistry and physics confers with the mathematics teachers on weaknesses in mathematics which show up in her classes. Pupils often bring problems from their science classes for discussion in mathematics classes. No teacher in the mathematics classes thinks that what she is doing is so important that she cannot break into whatever plans she may have in order to teach anything that her pupils have need for at any particular time.

Perhaps a brief account of how the work is carried on in the various mathematics courses will help to explain their content and the methods used. In our general mathematics, required of all eighth and ninth grade pupils, we attempt to give those experiences which we feel every child should have. Essential drill work is not omitted. Problems which are real to these bovs and girls are selected for study. When they study graphs, they make graphs of things which concern them at home, in school, or in their community. When they study fractions, they find places where they actually use them in everyday living. They bring to class real problems with which they are confronted on their jobs in the local stores. For example, this year eight eighth grade boys were studying agriculture. They needed to know percentage, how to measure land, and how to measure lumber, and they needed an understanding of fertilizer formulas. They brought these problems to their mathematics class and received the help they needed. Newspaper carrier boys were given work in their mathematics classes which enabled them to keep their accounts more accurately. Each eighth grade pupil kept a daily expense account and thus learned to budget his allowance and spend his money more wisely.

As another illustration of this general procedure, the teachers of general mathematics on the ninth grade level keep in mind the fact that in the case of many boys and girls this will be the last mathematics included in their high school programs. On the other hand, some pupils will study geometry and algebra in order to prepare for college courses in mathematics. The teacher must give her pupils the experiences which will be of most service to them. The first part of the work is of the same type as that in the other practical mathematics classes. Pupils learn how to make and use graphs, how to change data from one form to another, how to measure, how to figure interest on borrowed money, how to write checks and make out deposit slips, and how to figure taxes. During the last three months of the year they study algebraic equations and their practical uses and how to make and use formulas. Formal algebra is left to the eleventh year classes.

The boys and girls who come into the practical mathematics classes on the tenth and eleventh grade level have little knowledge of mathematics and no previous experience in participation in planning. They gradually gain confidence in their ability to solve problems encountered in everyday living and learn to work with each other and with their teacher as they plan what they shall study and how they shall study it. The following more or

less detailed account of the work as it has developed with one teacher may be taken as typical.

Many of the pupils who came to this class had had no mathematics since their first year in high school and readily admitted that they could not work arithmetic problems, that they understood very little about either whole numbers or fractions, and that they would like to know how to work problems with them. A few newspaper articles with large numbers to be read were brought to the first meeting of the class by the teacher. The pupils realized their inability to read and write such numbers, so we began with these. As soon as the pupils could read, write, add, subtract, multiply, and divide whole numbers, a study of fractions was undertaken. The pupils, some of whom worked in the ten-cent and grocery stores on Saturdays, brought real problems in fractions in which they needed to be efficient. This actual need for a knowledge of fractions made the classroom work more significant to them.

Problems for written work were made from grocery circulars furnished by the local grocery store managers. The type of arithmetic problems which are given on the tests by the local ten-cent store managers to girls applying for jobs were discussed. Pupils brought in problems involving fractions from their other classes in school. A familiarity with ordinary business forms such as sales tickets, inventories, invoices, and time sheets was gained as the students learned to add and multiply.

As the work progressed, unwieldy common fractions showed clearly the service a knowledge of decimal fractions could give; so they were decided upon as the next topic of study. Class discussions about everyday uses of per cent developed into work on trade discount, ways to borrow money, and how to invest it.

As their skill in using numbers increased, the pupils overcame their fear of mathematics. They were old enough to understand the "why's" as well as the "how's" in the work they did. As the work progressed they developed their own mathematical vocabulary with definitions in language which they could understand.

Sound methods of problem solving were emphasized in every way possible. Such problems as "Mr. Smith's wife and two daughters wish to go to Atlanta. Considering the transportation alone, which will be the cheapest way for them to go-by train, by bus, or in the family car?" The group decided on the information needed, designated certain ones to supply this information, and the next day each pupil worked out the problem and compared results with other members of the class. Interest in insurance was aroused by the use of such questions as, "Did the Athletic Association buy rain insurance on the Thanksgiving football game this year?" and "If you borrowed a car and while driving it ran over and hurt someone, who would be liable for a damage suit, your father or the one who owns the car?" Each pupil listed the kinds of insurance he was acquainted with and added to his list by examining textbooks and advertisements. Some insurance problems in the textbooks were worked, and through the reading required for the solution of the problems a vocabulary was developed. Pupils learned the meaning of such terms as premium, policy, beneficiary, annuity, endowment, cash surrender value, and special benefits. Insurance policies owned by the pupils were brought to class and studied. A number of pupils owned policies on which they paid five and ten cents a week. By the end of the study of insurance these pupils knew they were paying too much for the amount of protection they were getting and they knew why they were paying it. Good insurance salesmen from the city came to the class and answered questions which the pupils raised about companies and policies.

Toward the end of the third quarter of school in 1939 a group of pupils in general mathematics decided they would like to study about the cost of living in Moultrie. They picked an imaginary John and Mary who were planning to marry and decided to find out how they would fare on John's salary of \$20 a week. The group decided the first thing the couple needed was a place to live. This brought about a survey of the cost of renting rooms, houses, and apartments in various sections of town. Books and pamphlets were borrowed from the home economics department and the elements of good housing were learned. House plans were drawn to scale. Groups of pupils visited the local furniture stores and studied prices of furniture. Others studied prices in mail order catalogues. The girls brought lists of essential furnishings for a living room, kitchen and bedroom from the home economics department files. Home economics teachers were consulted by teachers and pupils whenever their advice was needed.

When a small apartment had been decided upon and the committees had brought in their prices on furniture, and pamphlets on the cost of food and clothes for a family of two had been studied, the group realized that John and Mary would have to budget his salary carefully and, as a consequence, family budgeting was studied. Answers were sought to the questions as to whether the young couple should build a small house or rent one. This brought about a study of the cost of building through FHA and Savings and Loan Associations loans. A study of installment buying was a natural outcome of the inquiries on furniture prices. Loan sharks and their methods came in for their share of attention. Boys in the class were buying radios on the installment plan. Others had borrowed a dollar on Monday and paid back a dollar ten on Saturday. The class computed the rates of interest paid on such transactions and were amazed by the results. The majority of the pupils reached the conclusion that the young couple should save up at least enough money to pay cash for the furniture before they married and that they would have to live very frugally if they were to make a

go of their marriage on such a salary. The boys and girls enjoyed this study, and for two years now at least one class annually has asked that it be repeated for them.

The confused state in which the finances of Georgia always seem to be and the ever-present question as to whether or not schools will remain open always provide a basis for a study of taxes. Graphs are made to show how the tax dollar is spent in Moultrie. As simple tax problems are worked, a vocabulary is developed since no such problem can be solved until the pupil understands the meaning of such terms as assessed valuation and mill. Tax rates for the different districts of the county, local tax forms, and income tax blanks are secured by pupils and brought to the class. Each pupil interviews two or more people to get their reaction to paying taxes. They generally find complaint that the tax assessors are not fair, but occasionally some citizen assures them that he gets more for his tax dollar than for any other dollar he spends.

Sometimes during the year some boy from the rural section brings to class a problem in measurement to which he wants a solution. Other real problems are sought from the cotton and tobacco acreages that have to be figured. The class then sets about to find out if it is worthwhile for them to spend a few weeks learning how to measure by bringing to class a list of things which they or their parents do measure every day. If the classes decide they need to know more of measurement, a study of the measurement formulas is undertaken, preceded by work in simple equations. Some practice in estimating is done, and some indirect measurements are tried out on the school campus

Special needs of individual pupils are handled as a part of the regular class work. For instance, one girl was operating a small school market. Her class work for several days consisted of computing the prices of the chickens she sold. She was delighted to be able to glance at her price card, constructed during her mathematics periods, and tell her customers the cost of the chickens. Her card had to be made over each time the local market price changed. Another girl needed to know how to make change rapidly so she could work in the school cafeteria. She was given practice in making change under the supervision of a mathematics teacher, although she was not at that time a member of a mathematics class.

In no two of the four years in which the advanced general mathematics has been offered has the work been indentical. The direction the course takes depends upon the interests and needs of the group. No topic is decided upon for group study without the consent and understanding of the entire group. And the principal criteria for the selection of a topic for study is, "Is it worthwhile?" "Do we as high school juniors and seniors need to know about it?" The success of any course, as flexible in its content and procedures as the one just described, is largely dependent upon the

teacher's skill in identifying the pupils' needs, her ability to plan with pupils studies suited to these needs, and the teacher's security and confidence in a method and content which are thus determined. This we recognize, and we are constantly striving to acquire the necessary skill.

The flexibility in our mathematics program is illustrated in an experience we had last year. In December of 1941 a defense class was organized in our school. The boys in this class were studying radio and woodworking. Their new schedule included one hour each day in which they were supposed to learn the mathematics they needed in their work in the shops. Instead of setting up new courses for these students, they simply took their problems to the classes in which they were already enrolled and worked there on the type of mathematics they needed. This year (1941-42) we have had a large number of boys and girls who have part-time jobs. Since our daily schedule rotates on a weekly basis, it is impossible for them to meet always with their regular class. Each pupil is allowed to continue his work in his subject in whatever mathematics class he can attend.

A further illustration of the attempt to make mathematics meet the needs of our pupils if furnished in the work with boys who are studying agriculture. Lester A., a senior in the vocational agriculture department, had taken for his project the raising of hogs, corn, Austrian winter peas, peanuts, and cotton. His project required much mathematics, and the mathematics which he needed was taught by his mathematics teacher in connection with the project as the need for it arose. Lester, with a definite number of acres for his project, was taught mathematics of measurement as he measured his land. He was taught to figure the expected percentage of loss in his corn from weevil and to compare the cost of treating it with the cost of the loss if it was untreated. He was taught to figure costs on lumber and building materials as he built the equipment required for raising his hogs, to figure the costs of their feed. He learned percentage as he figured the percentage of each food nutrient in the feeds he used. Before his spring planting he planned his terraces, figured their slope, their correct spacing, and the amount of fall they should have. He figured amounts of fertilizers he must buy for the most economical yield, and the percentage of interest he must pay if he bought on credit. Such methods necessitate close cooperation with the agriculture teacher. They often mean the learning of new applications on the part of the teacher. But they also mean that Lester has a purpose for learning mathematics, which we find is more than half the battle.

We wonder now how we could ever have assumed that pupils who could recite glibly the proofs of geometric theorems in school would of necessity think clearly on problems they faced everyday outside of class. For a numof years we have attempted to introduce our pupils to geometry in a more painless way than "Learn the first five pages in the introduction." We

have taught the concepts of geometry by elementary construction. Too, we have thought that the main purpose of teaching geometry was the development of a logical way of thinking rather than the memorization of a number of theorems and proofs. But not until we participated in the Southern Study workshops in the summers of 1938 and 1939 did we feel that we were making much progress in our own way of thinking about what geometry properly taught could mean to our pupils. At the first workshop we gained some ideas and changed our own way of thinking about geometric proofs. We readily admit that once we held for them the same reverence as did the ancient Greeks.

Now early in the year the pupils learn by construction work the meaning of geometric terms and are given opportunities to find out how poorly they think about everyday problems. They rate as good or bad simple reasoning situations, become acquainted with the meaning of conclusions, and hunt for them in data in various forms. They take decisions on school problems made by the faculty and student council and list the hidden assumptions involved. These decisions often afford an excellent opportunity for teaching democracy as a way of living with people and abiding by laws which are best for the majority affected.

Through study of non-mathematical material the pupils see how readily they jump at conclusions when data sufficient for clear thinking is not at hand. They try themselves out on the "if-then" type of reasoning material before any geometric proofs are attempted, and when the first geometric proof is introduced, the pupils are led to discover the proof for themselves. Little memory work is required. The pupils make their own notebooks in which they keep definitions of geometric terms which they have made and a list of theorems which they have proved under the head of assumptions. The pupils are allowed to use their notebooks at any time. Always the idea is kept uppermost in the minds of the pupils that no proof they develop is any better than the definitions and the assumptions on which the proof is based.

No effort is made to complete the five books of geometry as once we thought a necessity. However, we do not think much important subject matter is omitted. Congruent triangles, parallel lines, loci, circles, similar triangles, and ratio and proportion receive their share of attention. The prescribed order of theorems in the text is not always followed. Any proof is accepted from a pupil who can support it properly with previously defined terms and accepted assumptions. Most of book five is omitted in order to have the time to include simple originals from many textbooks and time necessary for work on non-mathematical material. And we do believe that a pupil may learn in his geometry a way of thinking about problems which will enable him to approach them with a fair assurance of success in solving them. Furthermore, it is our belief that if such knowledge is to be

transferred to problems in other fields, provision for such transfer must be made as the pupil learns. Thus the wide-awake geometry teacher will find himself searching each magazine and newspaper that he reads for material suitable for use in his geometry class.

We have two classes in formal algebra in our high school. These classes are for those pupils who plan to go to college. However, no boy or girl with the ability to do the work is excluded if he wishes to take the course. During the last few years we have attempted to individualize the instruction in these classes. After conferences with the pupils and their parents about the college selected, an effort is made to prepare each pupil for the school of his choice. Naturally those who select technical schools must have more formal advanced algebra than those who plan to attend Liberal Arts Colleges. Each pupil is charged with the responsibility to work at his own rate. Some pupils are advised to take extra work in summer school before going to college if they have not completed as much work as they should. Others who plan to return to high school for fifth year have their work adjusted accordingly and in addition to advanced algebra receive some instruction in solid geometry and an introduction to trigonometry. While we have no class in solid geometry, any pupil who wishes it before going to a technical college may be guided in his work in this subject during any mathematics class hour. Annually, a few pupils are thus provided for without the expense of offering a course to a very small number.

We make no claim to these pupils that the ability to solve a quadratic equation will make their lives happier. But so long as the colleges expect freshmen students to have a knowledge of radicals and exponents, so long will we feel it necessary to prepare our boys and girls for such courses.

We introduced this account with a statement of the assumptions which we accepted: (1) that eighth grade pupils are too young to receive much benefit from a formal algebra course and that they would get more mathematical experiences in line with their daily living from a general course in mathematics properly taught; (2) that pupils who do not plan to go to college need more knowledge of the mathematics involved in everyday living than they now gain in the first eight grades of school; (3) that geometry, if taught as a group of theorems in a certain prescribed order whose proofs are to be memorized, is painful to fully half of the pupils and promptly forgotten by most of them and hence is of little value; (4) that pupils who plan to go to college should be given enough formal mathematics to enable them to meet the requirements of the college thay have chosen; (5) that in this world of today boys and girls need a knowledge of the fundamentals of mathematics more than ever before. In line with these assumptions we have changed our mathematics program from algebra in the eighth grade, algebra in the ninth grade, plane geometry in the tenth grade, solid geometry and a half year of review algebra in the eleventh grade to general

mathematics in the eighth grade, general mathematics in the ninth grade with three months work in informal algebra, plane geometry or practical mathematics in the tenth grade, and formal algebra, more advanced mathematics, or practical mathematics in the eleventh grade.

The changes in the content of the courses and in our teaching procedures may be summarized as follows. We have sought to offer general courses best fitted for the needs of different groups. We have tried to individualize instruction in these groups. We have given the pupils a part in planning what they shall study and how they shall study it. We have sought practical problems for use in classes, problems which confront them now or may confront them in the near future. We have sought to help them develop a way of thinking that will enable them to make a practical approach to problems and to use logical reasoning in their solutions. We have tried to show them that there are problems in every field of life and that the use of mathematics does not begin with the opening of the textbook nor does it end with the finding of the answeres to the problems therein.

If we should be questioned as to whether or not these changes have been for the better, we would answer honestly that we do not know but believe they have been. We have accumulated some evidence which encourages us in the belief that the changes we have made represent improvement. The following are samplings of such evidence:

- Teachers have begun to examine the outcomes they wish their pupils to attain and do not hesitate to make changes in their methods of teaching and in the subject matter they use. No longer do the teachers feel they must stick to one set of textbooks, nor do they feel they must finish all of the work in any prescribed text; and they do not feel it necessary to teach the same subject matter areas year after year. They discuss freely with each other methods they have used which seemed successful and those which failed.
- 2. Pupils take a greater part in planning what they shall study and at the end of the year write criticisms of their work. These criticisms are frank and often point out to the teacher the weak as well as the strong points in the year's work. But up to date each tenth and eleventh grade practical mathematics pupil has said that he felt the course had been well worthwhile. Of course, different areas in the course had a stronger appeal for individual pupils.
- 3. In the fall of 1941 we sent the first group of seniors to college who had had general mathematics in the ninth grade and formal algebra in the eleventh grade. A check on the work of these boys and girls in college revealed that they had done as well in their college mathematics as any group we had sent in former years. Only one failure was reported. This boy had been advised to go to summer school

- at the technical college of his choice. He attended summer sol and passed his first course there with no trouble. His failure mathematics at the same college in the fall might have been du the ineffectiveness of the college course or to his lack of maturit of purpose in his college work.
- 4. Two boys who were below-average students in eighth- and ningrade mathematics came to high school five years. They were vised by the principal to elect practical mathematics before tall algebra in their senior year. In this class both boys did good we gained some confidence in their ability to learn mathematics, did fairly good work in algebra in their senior year. Pupil A end the Citadel at Charleston, South Carolina, in September, 19 and made an A in his mathematics. Pupil B went to South Georgia, a branch of the University of Georgia, and made an A in his survey mathematics course.
- 5. Pupil C told his mathematics teacher this year: "My courses practical mathematics and geometry have meant a great dea me. I learned in geometry to really think through a problem fore I make up my mind about it."

 Pupil D, home on furlough from the Navy where he was in the plane mechanics school, said: "My practical mathematics con in high school has really helped me in my work in the Navy scho Pupil E, home on furlough from the Navy, was studying to be radio technician. His comment to the principal was: "The ma matics I learned in high school was directly responsible for my cess in my new job."
- 6. The mathematics teachers expressed their opinion thus: "We lieve the changes we have made are for the better because our pils feel more and more that what they are learning is worthwl We realize that our work is far from perfect, but we do feel that are moving in the right direction."
- 7. The principal of the high school gives this opinion: "I am convir that the mathematics program in our high school now is more ne meeting the mathematical needs of all the pupils than ever bef A larger number of pupils each year express a need for pract mathematics because they are beginning to see meaning in n bers and to understand the use of mathematics in everyday so situations. We shall continue to attempt to explore better way meeting the mathematical needs of the great mass of American I and girls.

These and other evidences have influenced our belief in the validit the assumptions underlying our attempts to improve the mathematics gram and, as a consequence, we propose to continue our efforts in the general direction outlined in this discussion.

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Working with Students on Their Needs and Interests

BY VINNIE LEE WALKER

Teacher, Montevallo High School, Montevallo, Alabama -

Together with many other teachers I have grown skeptical of planning n advance a series of experiences in which all boys and girls will be expected to participate on the assumption that what is good for one is good for all. Although I still believe that there are certain skills and understandings which all boys and girls need in order to reach an acceptable level of citizenship in a country such as ours, it seems that there is an unlimited variety of experiences which can be made available in order to give students the opportunity for creative expression, aesthetic appreciation, development of recreational interests, and vocational choice and training. It was on this assumption that I was interested in working with others of our facalty in an attempt to provide more adequately for the satisfaction of individual concerns, needs, and interests of the boys and girls of our community.

Our own school situation presented a realistic challenge. Montevallo High School serves not only the small town of Montevallo, which as a colege town is made of widely varying cultural levels, but also serves the surcounding rural and mining communities. For many years our school ofered almost identical experiences to all students, the son of an underprivileged miner taking part in approximately the same type of activities as those engaged in by the daughter of a college professor.

Our present school program is an outgrowth of our attempt to give each student opportunity to develop his own personality and vocational possipilities and at the same time to provide as realistic training in democracy as our own techniques and his past experiences permit. Our whole school ramework is to provide the flexibility necessary for a student to plan a program of work which is designed to meet his own particular needs. Through a homeroom period of two hours the student works with his guidance teacher on problems which are of concern to him. The teacher attempts to help nim in the solution of these problems and also directs him to other teachers who are prepared to do so. Problems are conceived of as relating to imnediate everyday needs or to more remote needs. In other words, the tudent may be concerned with preparing a speech which is to be delivered comorrow or he may be concerned with a series of related experiences deigned to prepare him for a certain course in college. Either type of probem is considered legitimate. Although the student confers with his homeroom teacher about his entire day's work, he cannot be under her direct supervision throughout the day, since she must after this period be available to work with students from other groups along the line of her special ability. He may spend additional time with her at these special periods however, and quite frequently does.

A typical day in our school may be illustrated by following Billy, a happy go-lucky youngster from one of the nearby mining communities, as he goe about his work early in April. It should be remembered that this account is an actual description of one student's day as it developed from our manner of working—not a day that we had visualized in our preliminary planning. It should also be kept in mind that Billy's day is not identical with that of any other boy or girl in school.

Billy reports to his homeroom at 8:00 in the morning. Since this is Thurs day, banking day, he will be in his homeroom for fifteen minutes instead of the ten usually allowed for roll call. He is one of the two bank directors so he has charge with another boy of accepting bank deposits, giving receipts, and distributing slips on which students who are buying defens stamps designate the number and denomination they want. At 8:15 he takes his reports to the cashier of the bank and comes back to his homeroom which is also the workroom, the first two periods of the day, for the school paper staff. Today he is to go to the elementary school for an interview with the principal with whom he has made an appointment, for he is the elementary school reporter. Since he does not know whether he will be able to finish his interview by nine, the hour he is due for work in the shop he notifies his shop teacher before leaving that he may be a little late in returning.

At nine he is back, however, and begins a second dresser cover on th loom. He is using a new color and a different design and asks me to comby and look at it.

At 10:00 he reports to the daily meeting of his homeroom group. The president of the class calls the group to order, and the secretary reads the minutes of the last meeting. The minutes include names of members of the two committees who are to work out the ideas already agreed upon be the class for their contribution to the carnival to be given in two weeks—miniature bowling alley and a fortune telling booth. Billy is on the bowling alley committee. Old business is asked for, and someone reminds the class that after the business meeting the carnival committees are to begin their work.

After a report from a member of a first aid group which has recently beer organized, the business meeting is adjourned and the carnival committee assemble at two tables. After the bowling alley group is seated, they decide upon a chairman and a secretary. Billy is chosen and, as the discussion of plans progresses, takes notes of conclusions reached. When job

are listed, Billy volunteers to help with the construction of the alley. With the two other boys, who also decide to help with the construction work Billy withdraws from the larger group; and the three boys before the bell rings draw a rough design for the alley.

Billy remains in the room when the bell rings, for he is one of a group of boys and girls which meets here regularly for the purpose of reading—poetry, stories, biography, novels, plays. Billy likes especially Western and adventure stories and is now reading the life of George Rogers Clark. Since this is not a discussion day—the students and teacher agreed upon two discussion periods and three reading periods a week—he spends his entire hour reading and jumps with a start when the twelve o'clock bell rings.

He reports to the banker up the hall and secures the defense stamps his class applied for in the morning and brings them back, with a sheet of paper on which he has copied the list of the people in the class who wanted stamps. His other classmates have all reported to their homeroom, for this is the activity period, a period in which there are no special groups regularly meeting. The people who have bought stamps receive them and sign their names on the list, after which Billy files it with all the previously signed lists. He spends the remainder of the period meeting with a small group of boys who are studying for their first aid lesson.

At 12:30 Billy goes to the cafeteria for lunch and then spends the remainder of the lunch hour on the ball field. When the 1:20 bell rings, he reports to his first aid group, where he remains until 2:10, when he goes to the science laboratory. Until a week ago he had done various kinds of projects, mostly electrical, for he hopes to be an electrician some day. He is now working on an electric motor.

At the sound of the 3:00 bell Billy scampers out, for he goes home on the bus and the driver wastes no time in getting away.

RESPONSIBILITY OF GUIDANCE TEACHER

As a guidance teacher I was responsible not only for seeing that Billy and the other boys and girls in my homeroom spent profitably their period with me, but also for planning with them their work for the entire day. A part of the homeroom period was, therefore, used for planning with students their entire programs, and a part was used for planning and carrying out individual and group projects in their homeroom. There was no regular allotment of time for these different kinds of activities the period was used entirely for one or the other or was divided between them.

In order to plan effectively with my group of twenty-five boys and girls, I realized that I must use all available sources of information concerning them—parents, other teachers, and records, as well as the students themselves. I could not hope to know them well enough during the first few days, or even weeks, of school to be able to help each one to plan for all of

experiences which he needed. Feeling that it was important that each on begin work as quickly as possible, I realized that in the beginning I should no doubt, have to set tasks and agree on work—short projects or special subject courses—whose value neither I nor the student recognized. I in tended constantly, however, as I came to know the students better, to true to help them to substitute work which did seem to more nearly satisfy their needs.

Since I did not make the assumption that I knew what was best for each student, I was saved the puzzling task of planning ingenious ways of bring ing boys and girls to my point of view in choosing activities. I conceive of my task as that of learning to know each boy and girl as an individual and in helping each one arrange for activities which would enable him the find acceptable ways of developing his possibilities and satisfying his ambitions.

We had decided at our pre-school conference that during the first week of school no special groups or classes would form and that students would spend their time in their homeroom and in talking indivdually with specia teachers with whom they might be interested in working. This time gav me as a guidance teacher the opportunity of gaining a great deal of informa tion about the pupils in my room. Although my study of boys and girl went on throughout the year as I saw them in many kinds of situations freedom from other duties during the first few days of school gave me th opportunity for intensive collecting and recording of information. Befor the opening of school I had learned all that I could about my pupils from former teachers and from records in the office-records of work done th preceding year as well as intelligence and achievement test scores. Durin the first week of school through individual conferences and informal conversations with the boys and girls, I was able to learn not only somethin of their interests, difficulties, and plans for the year, but also much concern ing their personalities and abilities. Questionnaires were sent to parent asking for information concerning physical condition of their children health habits, home duties, needs, talents the parents should like to see de veloped, and vocational plans. From questionnaires given to students such information as the following was gained: studies liked most, studies liked least, talents, special interests, magazines and newspapers taken i their homes, kinds of stories liked best, their needs as they recognized them and vocational interests.

Group discussions based on such questions as what students hoped t gain from the year's work, opportunities offered by the school, working of the basis of needs, and what goes to make a well-rounded personality gav students the opportunity through the exchange of ideas to get new insight into ways of choosing their activities. Teachers of special subjects, such as science, English, and mathematics, were asked to come into the group to discuss opportunities for work in their particular fields.

Students' written work during the first few days as well as throughout the year-autobiographies, book reviews, journals, any type of creative writing, and plans of work—served to show much about their needs.

Tentative individual schedules were worked out so that the following week students would be able to begin "regular" work. Work in special departments was planned in one of the three following ways. Any one who wished to take a particular course might schedule one in such fields as Latin, mathematics, and modern languages. A student who was not interested in any particular course but in a broad field such as science, literature, or art might go to the teacher in that field and plan with him special activities. The third procedure was for the student to go to a special department with a particular problem on which he wished help. For example, two boys who were to make an aquarium for use in their homeroom took this problem to the science room for solution. It was understood in this third type of procedure that the student return to his homeroom when his job in the special department was completed unless he became interested in other related problems in the field and wished to continue work there.

As the year progressed, in addition to written work already referred to, current reports of work in various departments gave a picture of the pupil's whole program as did his daily, weekly, and semester summaries and evaluations of accomplishments.

Conferences with teachers with whom students were working helped not only in locating needs but also in planning follow-up activities. Group conferences including all teachers having contact with a particular student were scheduled, each teacher bringing all the information she had been able to gather concerning the pupil. Frequent individual conferences with teachers concerning the work of a student were held informally. Individual student-teacher conferences were held at any time the student or teacher felt there was a need.

A series of group experiences engaged in throughout the year served to show much about individuals. Careful observation and keeping of records were necessary in order to make the most of such experiences as a means of indicating needs.

PLANNING INDIVIDUAL PROGRAMS

As already indicated, tentative schedules were worked out with students the first week of school. I should like to emphasize the fact that they were merely tentative. At any time a strong interest developed or an occasion arose which presented the student with an added responsibility, his schedule of work was subject to change. This does not mean, however, that jobs could be left unfinished or that a student was allowed to make a modification in his program as the result of some fleeting interest.

The following examples show how programs were planned with thre types of students, one having a definite vocational interest, one with a special talent, and another having neither a strong vocational interest nor a special talent.

Elton was a bright boy but somewhat an "outlaw," having been involved in a number of misdemeanors for which he barely escaped being sent to the state reformatory. His work the preceding year had been a complete fail ure, and he had not been promoted. His father was dead, and his mothe apparently had not been able to exert much influence over him. During the summer months he had secured a job at the local print shop and seemed seriously interested in his work. Since the editor reported that the boy had done well, we felt that there was a chance that this vocational interest migh be used as the basis for his school work. Because of the success of his sum mer's work, we agreed that at the end of nine weeks in school, he should be advanced if he showed sufficient interest and application. He came to school and mapped out his program to include experiences in line with hi printing interest. He chose journalism, typing, and world history, with time for work at the print shop. He did his work acceptably and at the close of the first nine weeks period was transferred to an advanced home room group and classification where his homeroom teacher suggested tha she and I work cooperatively with him for the remainder of the term. Hi year's work was satisfactory.

Ellen was a sensitive, underprivileged girl who, at the beginning of school showed no outstanding interests. In addition to work in the homeroom she decided to take vocational home economics and mathematics, the remainder of her day to be spent working temporarily in various departments. With another girl, she volunteered to make a wall hanging for our home room and scheduled time in the art room for that purpose. During this experience with color and design, she became intensely interested in ar and showed remarkable talent. After the wall hanging was completed she asked to schedule time in the art room for regular work, first an hour aday, later two hours. Through conferences with the art teacher, we adjusted her schedule to make such an arrangement possible. Her work there proved an outlet for her emotions which changed her entire personality. That she actually possessed ability was shown by the quality of her work.

Her work during the remainder of the day changed color as the year progressed. She spent approximately an hour a day in the shop where she made articles the designs for which she worked out in the art room. Through individual planning with her mathematics teacher, she was able to some extent to correlate her mathematics with her art. One of her pictures, com-

pleted in the spring, won honorable mention in the American Magazine art contest.

Many students on the eighth and ninth grade levels have not developed any particular talent or vocational interest which can be used as the basis of their work. John was one of these. He was a sincere, hardworking boy. His family, who lived on a small farm about two miles from town, were good citizens. Although the parents and older members of the family had had few educational advantages, they possessed a sturdiness of character and a dogged persistence which enabled them to improve their economic position and give the younger children better opportunities than they themselves had enjoyed. John had no particular talent and no decided vocational interest, though he said he might like to do farming if he could have modern equipment. He believed he might also be interested in some type of mechanics or engineering. He was a boy of above average mental ability, poor writing skills, and fair reading ability. His most interesting subject was mathematics, in which he did excellent work. He was also interested in athletics.

His program was arranged so that he worked throughout the year in the field of mathematics. Such comments as the following from reports of the mathematics teacher show the quality of his work in mathematics—"is doing splendidly, thinks well, works faithfully, made perfect score on recent test." Because of his vague interest in engineering and mechanics John was encouraged to work regularly in the field of science the entire year. The science teacher records: "independent worker, thinks for himself, is doing variety of kinds of experiments."

He felt that construction work in the shop would be of practical value to him and worked there for approximately half a year. He enjoyed singing and was a member of the boys' glee club. Since he needed help with his writing and choice of reading material, he worked in an English group; however, when baseball season came, he was given individual help on his writing so that he could have time for baseball. He had some time for reading in the library and found time to learn to type. When first aid classes were made available, he spent an hour a day for nine weeks on first aid and completed requirements for a Junior Red Cross First Aid Certificate. At his homeroom period, besides planning ways of getting all the experiences he felt he needed, he had part in social and civic experiences with the others of his class.

GROUP EXPERIENCES

As has already been suggested, a part of the homeroom period was used for carrying out group projects. Although these group experiences often served as a means of discovering concerns, needs, and interests of particular students, they were also definitely planned to meet certain rather general needs accepted by the students and teachers.

The organization of the class for the purpose of solving group problem was the first approach to a series of cooperative enterprises which the class carried out. A president, a vice president, a secretary, and a treasure were elected and thereafter held the daily meetings of the class at whice time problems were discussed and decisions concerning them were reached

The first real project the class attempted was making the school room livable. Each student chose some particular task—making block-prim draperies for the windows, repainting bookshelves and making additionations, building flower boxes, making an aquarium, designing wall hanging drawing, painting and framing a large map of the world, and arranging the class library. These jobs took the students into the art, science, and sho departments for help.

Through their former homeroom teacher I had learned that the boy and girls had not been able, for some very practical reasons, to make a cor certed effort to deal with the problem of health the preceding year. I discussing conditions necessary for a successful year's work, I stressed th importance of physical fitness and found the students enthusiastic about arranging for physical examinations. Since the county health officer an nurse would not be available early in the year, arrangements were mad with a private physician for the exanimations and he spent an entire da with the class, the physical education teacher assisting. The examination revealed a great many individual problems-infected tonsils, cases of ur dernourishment, decayed teeth, poor vision, skin infections. Parents wer informed of the results of the examinations, and students were encourage to begin correction of difficulties. In addition to particular difficulties re vealed, the problem of prevention of diseases common in this area wa raised. After writing to the county health department, individuals mad studies of causes and prevention of such common diseases as tuberculosi typhoid fever, malaria, colds, and poor nutrition.

Such tangible evidences as the following resulted from the health work. Two girls made a study of typhoid and succeeded in doing such a realistic job of presenting facts that twelve members of the class who had not bee inoculated against typhoid asked for the opportunity and were inoculated. Three boys were impressed with the relation of polluted water to typhoid and under the direction of the science teacher experimented with water testing for members of the group. Two girls had infected tonsils removed. Three boys accepted responsibility for arranging with one of the local deritists for dental examinations for members of the class. The dentist followes the examination with a visit to the class in which he discussed difficulties revealed. He found that two girls had severe cases of pyorrhea and the every student except three had cavities ranging in number from one to twelve. As a result of the examinations and discussions, approximated half the class had dental work done. Correct care of the teeth was also extended to the class had dental work done.

plained and everyone seemed to become conscious of the value of taking care of his teeth. Through the help of the home economics department some work in nutrition was done.

The third group project which the class attempted was of a civic nature. At the request of the town the school sponsored a school-community fair. Since the group was working on the problem of health at that time, they decided to plan their booth to illustrate the importance of health. There was much discussion and combining of ideas before it was finally decided that the booth should show that it was patriotic to be healthy. The students working on nutrition contributed displays of healthful food; recreational activities so necessary to health were illustrated; pamphlets on prevention of prevalent diseases were secured from the county health department; and members of the department were invited to be present in the booth to answer questions; posture tests were given by a small group who had been trying to improve their own posture; and students who had been concerned with their weight secured scales, weighed people, and gave them material on the importance of keeping up weight.

The actual construction of the booth challenged the talents and ingenuity of the students. A group of boys did the construction work, and three girls who were especially interested in art planned and directed the decoration. Designing and making a twelve-foot figure of Uncle Sam, which they place at the side of the booth, was itself a difficult problem; working out a scheme for having him tip his hat to the crowd proved an exciting additional puzzle. With his free hand he held a streamer sign which extended across the entire front of the booth and said in bold red and blue letters "Be A Healthy American." The booth was very effective and won for the class the third prize of three dollars, with which they were quite delighted.

Each class in school was invited by the Student Association to present an assembly program at some time during the year. We scheduled our date for the early part of the second semester. Since the class had not had the experience of giving a play, it decided to present one. A number of suggestions were made, the one accepted being an original adaptation from Penrod. Two girls in the class who were interested in dramatics and belonged to a play production group volunteered to work out the dramatization in their group. When every one was satisfied with the adaptation, tryouts were held and the play cast with the help of the dramatics teacher who also assisted in their practices. When the play was produced, everyone had a part—in the cast, on the properties committee, as members of of the stage crew, or in the make-up group. The following are some reactions given in weekly accounts of their work.

"I was supposed to help get the things for the play and arrange the stage. I helped get a mirror and some chairs, and I went to town to get some powder. When the play was over, I helped take the desks back to our room. I got a lot out of helping even though I was not in any of the scenes." (Calvin.)

"In our play *Penrod* I was Penrod's friend, Sam Williams. I couldn't say whether I did my part well or not, but I was proud of my part. I think our play was a nice play and a big success. But I'm sure it would not have been so good if it hadn't been for our director, Miss Kornegay, and the other players. I think the characters were very fine." (James.)

"I was a knight in the play that our class gave in the auditorium last Thursday. In the play I did not have anything to say but I had to sit on the stage. I think I did my part, although my knees were knocking together. I got a good bit of experience with the play, because it was the first time I had been in a play before a big audience. I believe I can do better the next time because I got sorta used to it." (Billy.)

Although the class had other group experiences—class parties, and a show for the annual school Carnival among them—the ones described are typical.

Bases for Choice of Activities

Because of my responsibility in helping students to arrive at decisions concerning the selection of pieces of work, the reasons for choices made has been of particular concern to me. For the same reason that there were no definite programs set up for the students before the opening of school, there was no preliminary analysis made of what constitutes sound reasons for engaging in activities, and there were not criteria for judging the worthwhileness of possible activities. However, I tried consistently to challenge not only the student's thinking in arriving at decisions but also my own in advising him. As boys and girls decided, with varying degrees of guidance, upon definite jobs, the choices appear in retrospect to have been for one of the following reasons.

- I. A boy or girl chose an activity because he enjoyed it—perhaps it was working in clay, reading, singing, painting, playing ball. He may have shown no special aptitude for the activity; but it gave him pleasure, furnished him with a means of recreation. Of course, in deciding upon this or any activity, the length of time to be given to it, the place, and the situation had to be taken into consideration.
- 2. Pieces of work were often agreed upon because the doing of a job was an individual or group responsibility. The class library must be attended to regularly, class minutes must be kept, work on any group project must be divided as evenly as possible, and each student must do his share.

After the declaration of war, the students felt it their duty to do something positive toward helping. Arrangements were made for first aid classes and twelve members of the class—eight boys and four girls—completed requirements for Junior Red Cross First Aid Certificates, the greater number of boys being due to the fact that the girls taking vocational home economics had home nursing in their economics courses. The majority of the class bought defense stamps regularly, an average of a third or fourth buying each week.

- 3. The boy or girl planning to attend college engaged in activities as preparation for college work. Although some of us felt that many activities not engaged in for the specific purpose of college preparation do help the boy or girl to adjust himself to college life and work, there are particular areas of subject matter which we were afraid to see the student leave unexplored if he intended to continue work in college. Students were therefore advised to take work in particular fields, perhaps specific courses in such areas as Latin or mathematics, as a preparation for further work in those fields.
- 4. For a somewhat related reason students chose activities which would help them to prepare for chosen or anticipated vocations. For example, Dan planned to be a carpenter. He was a boy of mediocre intelligence—I. Q. 72, a reading grade-equivalent of 5.2, weak eyes, a shy reserved personality. His father, a miner, wanted something more than mining for the son. The boy's most satisfying work was done in the shop. He not only worked in the shop regularly one or two periods a day but also chose construction jobs when group projects necessitated "building."
- 5. Activities were also engaged in because of special talents. Sara had a love for writing rhymes—fanciful, light, delicate, and sometimes humorous. After seeing the decorations taken from our Christmas tree after a party, she wrote in a short poem,

The red and green roping Look as if they're eloping From the neighborhood store nearby.

She scheduled a regular period with a group who were reading and writing poetry, worked with these students throughout the year, and made contributions to the collection of creative work the group made.

When our class gave a play in assembly, two boys who had not realized they had acting ability showed considerable talent. They were proud of the discovery, and a few weeks later when students were invited to take part in an original school-wide production they were encouraged to try for parts. They confidently reported and won excellent parts. One of the boys was overheard to reply to another student who had said she did not plan to try for parts be-

cause she did not have any ability, "I didn't know I had until we we gave our play."

6. The development of skills necessary in everyday living was considered a legitimate reason for engaging in an activity. A girl who had a speech difficulty scheduled work with the speech teacher in order to overcome the difficulty.

One boy in the class read, spelled, and constructed sentences very poorly. (Typical sentences, "I joined churse went I was eleven. We copier oure paper.") With an I. Q. of 73 and fourth-grade reading ability it was impossible for him to progress rapidly. He was well adjusted socially and was anxious to overcome his difficulties. We arranged for him to spend an hour each day working with an English teacher on papers he had to write for various classes or projects, keeping in a spelling "notebook" lists of words he missed, working on writing short, simple sentences. He was encouraged also to take typing and typed approximately an hour a day. Although he does not yet write perfect English, he has improved remarkably.

A boy who lived on a small farm was interested in a chicken project. When his father and an adjoining farmer worked out a cooperative enterprise, G. C. was encouraged to keep careful accounts of all expenditures and money taken in, not only as a mathematical problem but also as an economic one.

- 7. Since physical health is recognized as an asset, activities relating to any individual's health or activities necessary in maintaining community health were encouraged. The class health check-up remedial work was chosen on this basis.
- 8. Activities which would help boys and girls to become socially self-reliant were encouraged. The majority of our students come from mining communities where there are limited opportunities for social life, and we attempted through our school-wide as well as class organizations to give students experiences in simple social affairs. Besides the tea given for their mothers, our class gave a party for the other sections of their "grade." Boys as well as girls took short courses in cooking and entertained small groups of friends at tea, lunch, and breakfast.
- 9. Where there were unattractive home surroundings, both boys and girls were encouraged to engage in activities which would help them to make a greater contribution in their own homes. Many boys as well as girls made useful, colorful articles—tables, racks, handwoven covers, trays, pictures, etc., while others selected such projects as beautification of some unattractive spot in their yard or home.

10. An activity was often suggested to a student with the hope that it would help him or her to overcome some emotional disturbance.

We had in our class a tall brown-eyed blonde, loud, sensitive, blundering. Although intelligent and completely reliable, she was lacking in selfconfidence. She planned to prepare herself to do secretarial work. She came to school on a bus from a small mining town and had a limited cultural background. Anne was often unhappy because of the feeling that she didn't fit into things and sometimes spoke sharply to people who disagreed with her.

I tried to see that she had the opportunity to accept responsibilities which would not only necessitate her having to give and take but would show her classmates her sincerity and ability. I felt that work in the dramatics group in which the students wrote and produced their own plays would help her to develop poise. It seemed to give the opportunity too for the cultivation of a pleasing manner and voice which would be essential in secretarial work. She could not be persuaded to join the group. When our class produced their adaptation of Penrod, however, Anne was cast in the role of the mother. She seemed almost hopeless with her gawky manner and shrill voice, but she showed the same persistence she had shown in her other work and gave a good performance. In her own account of the play she says, "I learned how to talk to an audience, how loud to talk to make it plain for every one to hear. Every one said I did good. I was a little scared when the play started, but I got all right before it was over."

With this success in dramatics, I am hoping she will next year have other experiences in some phase of speech work.

Billy was an intelligent boy but frightfully timid. Since he had a clear, pointed style of writing, it occurred to me that working on the school paper might appeal to him and certainly it would offer him opportunities to gain the self confidence he needed. He was pleased with the suggestion, joined the staff, became an excellent reporter, and developed more assurance in his contacts with people.

EVIDENCES OF PROGRESS

As indicated earlier, our idea of what the school could do for each student was two-fold, to prepare him for social and civic life and to give him the opportunity for the development of individual interests, needs, and talentsaesthetic, recreational, and vocational. In the light of these purposes, I shall attempt to suggest some evidences of progress as well as lack of progress on the part of the boys and girls of this group.

Of the twenty-five boys and girls enrolling in this class, twenty remained in school throughout the year. The record of these twenty will be reviewed first.

Practically every member of the group showed progress in his acceptance

of social and civic responsibility. Almost every one seemed to feel responsible for expressing ideas when the class was faced with problems. Any member of the group could preside at a business meeting in an acceptable manner. The majority entered into discussions of current affairs and read newspapers and magazines regularly. Every member of the class voluntarily took part in an assembly program, the school-community fair, school carnival, Christmas basket project, banking in the school bank, and buying defense stamps.

Many of them developed a considerable degree of initiative in civic and social undertakings. For example, Jane asked that our class be allowed to have a representative on the school defense council, first represented only by senior-high-school students. Together with another student she wrote a request from the class to the principal asking for representation. James said that we should write the dramatics teacher a note thanking her for helping us in the production of our class play. Often members of the class brought to the attention of the others worthwhile jobs or opportunities for work. Sometimes members assumed responsibility for organizing groups to do special work. John organized a boys' first aid class, not only getting together boys who were interested but also arranging for a teacher and times for meetings.

Every one had experiences in simple social affairs. At each undertaking—tea for parents and parties for other sections of their grade—each boy and girl had part in making general plans for time, place, invitations, and entertainment, and each had particular responsibilities both in making preparations and in entertaining the guests.

Sixteen of the twenty students developed definite recreational or advocational interests on which they spent time regularly with pleasant and apparently profitable results. These interests included such varied activities as wood work, weaving, pottery, dramatics, art, reading, newspaper work, glee club, bank, poetry writing, and athletics. The reading interests of the majority of the students were broadened, geography, travel, poetry, and plays often being added to their initial interest in stories. The enthusiasm which many of them showed in these activities was one of the most encouraging indications in their entire year's work.

Nineteen students had, at the end of the year, some definite plans for work beyond high school. Twelve had plans for particular vocations for which they had received some training during the year. Of three boys interested in mechanics, one had practical experience during school hours with a town mechanic; the other two did some form of mechanical work in the shop and science departments. Two girls who plan to do secretarial work received some practical training; and two girls who expect to become nurses had some realistic experiences in the home economics department,

worked on nutrition in the science laboratory, and took first aid courses offered—both receiving junior certificates.

Through the physical examinations and follow-up work in physical education and nutrition, as well as through such corrective measures as dental work and removal of infected tonsils, most of the boys and girls seemed to become conscious of health as a personal problem.

In working out programs for next year, students showed much more perception in selecting ways of following up their needs. For example, Ben plans to continue work in mathematics and science because of his interest in electricity, to hold a position on the school paper staff, work on which he began this year as a "cub" reporter, and to have classes in the fields of literature and history. Rita, who is especially interested in dramatics and nursing, has planned her program for next year to include experiences which will contribute particularly toward her development along these lines—play production, home economics, science, literature, mathematics. Sara wants to continue getting help in her writing of poetry. She intends to be in a literature group in which there will be reading and discussions of stories, poetry, and plays. She plans to have time regularly in the art room where she did some work this year. Since she intends to do secretarial work when she is through school, she wants to spend a considerable amount of time in the secretarial department.

Probably the most favorable outgrowth of the work of these boys and girls has been the development of the ability, to a degree, to think for themselves, both in regard to acceptance of responsibilities and in their choice of activities on which they spend their time.

Five students withdrew before the close of school in the spring. An attempt at analysis of causes for withdrawals may be of interest. In the first place the I. O.'s of these five students—three boys and two girls—ranged from 72 to 88, with general achievement ranging from fourth to seventh grades, seeming to indicate that we apparently still are not offering meaningful experiences for the weaker students or are attempting to hold them up to standards which they are incapable of reaching. The three boys (I. O.'s 72, 76, 82) came, one from a rural section, and two from mining districts. Their mental curiosity did not appear to be satisfied through reading, and the school offered few possibilities for practical work with their hands. There was no teacher whose training prepared him to help them in agriculture or in stock or poultry raising. The manual arts shop, though it offered excellent opportunities for crafts, was not equipped to help boys in planning and building such practical articles as chicken coops, door steps, and screen window and door frames. Two of the boys withdrew to accept jobs, one in a cotton mill, the other in a store. The third boy, the one lowest in intelligence, simply "quit." The fact that his eyes were very weak and that neither his family nor the school seemed able to do anything practical toward correcting this difficulty no doubt was at least partially responsible.

Jane, a shy girl from a small mining community, quit simply because she did not like to come to school. She frankly said so a number of times before her withdrawal. She said she did not see why she should have to come to school, for none of the other members of her family had finished high school. An older sister had been allowed to withdraw a year earlier. We were not able to put her in touch with activities which were meaningful to her. At the beginning of the school year, feeling that she would probably marry early, we suggested home economics; and she worked in one of the vocational home economics groups as long as she remained in school. She was encouraged to work with a dramatics group but was not interested. Although she did not seem to have difficulty in "getting along" with the other students, she took no active part in group projects in her class, preferring reading quietly to any other activity. She was a voracious reader, apparently using reading as an escape. Although I never was able to visit her home, I learned that the family, though not underprivileged to the degree of many families represented in our school, nevertheless offered few opportunities for cultural development. I consider our inability to reach her one of the outstanding failures of our work.

With a twenty per cent loss in number it is evident that we made only partial provision for the needs of this group. Trying to work with boys and girls on the basis of their needs and interests has involved many difficulties. Through my efforts to overcome these obstacles, I have reached certain tentative conclusions. Probably the greatest difficulty involved in working in this manner is the demands made of the guidance teacher—the keen understanding of adolescents, patience, optimism, and breadth of interests. If her work is to be most effective, the guidance teacher should be allowed adequate time for record keeping, conferences, report writing, varied contacts with students, and broad reading. Work of a nature such as I have been undertaking would be greatly facilitated if all teachers coming in contact with a particular group of students could agree upon a working philosophy. Boys and girls become demoralized when they are encouraged to work and plan for themselves in one situation and in the next have to adjust themselves to dictatorial methods. Some framework for scheduling, probably arrived at cooperatively by teachers and students, should be agreed upon, subject to modification. Although actual work can be done within the traditional schedule, too rigid a schedule often hinders rather than helps the student in his attempts to work on his individual problems. A functional type of college training would be of great benefit to a teacher attempting to work with her students in the way in which I have tried to work with this group. Most important of all is the need for an open-minded attitude on the part of teachers toward the whole problem of education for, like democracy, good teaching is a constant search for more effective ways of working together.

A Description of a Teacher's Work with Tenth Grade Pupils in English-Social Science V

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The pupils whose work is described in this paper attended Frankfort High School located in Frankfort, the capital of Kentucky, a city which has a population of about 12,000.

In planning an educational program for pupils in this school several factors peculiar to the city must be taken into consideration. The fact that the State Department of Education and its personnel are located in Frankfort results in a more competent, critical analysis of the school program by its patrons than is experienced by most schools. Then, the fact that many patrons of the school hold political positions of a temporary nature results in several problems which must receive more attention in Frankfort than in most schools. In the first place, the transient nature of the population demands more careful planning and provision for transfer pupils than is necessary in most schools. In the second place, this situation makes it difficult to interest patrons in the school because their property, legal residence. and real interest often remain in their home community to which they intend to return. Finally, their frequent visits to their homes cause the Frankfort High School program to be subjected to more frequent superficial comparisons with those of other schools than is the case in more typical circumstances. The third factor which must be taken into consideration in planning the Frankfort School program is the fact that so many persons in the city receive positions through political preferment. This makes it more than normally difficult for teachers and pupils to see the wisdom of practicing an achievement-through-effort philosophy. There is a strong tendency for pupils to seek advancement through preferments rather than through effort and accomplishment. A fourth factor is the presence of the state offices and the prevailing political system of assigning positions, as well as the presence of five distilleries and two factories in which work suitable for women may be found. This situation results in the employment of both parents of many of the children with the consequent lack of parental participation and cooperation in the school's effort to develop an effective educational program for the children and young adults in Frankfort.

The immediate nature of the problems created by the factors above makes

it necessary for the school to maintain unusual vigilance lest it fail to make adequate educational provision for the children of those citizens who make Frankfort their permanent home, conduct the city's business concerns, and look to Frankfort High School to prepare their children for life in the community.

The school had not taken cognizance of these factors, to any great extent, until five years ago when it received notice that the Southern Association Study was to be conducted. Since all schools in the Association were invited to submit problems which would serve as one basis for their selection for participation in the Study, the principal and the teachers in Frankfort High School decided to examine their school program and community to determine whether or not conditions existed which would make entrance into the Study advantageous. During this examination it was discovered that the major concern of the school had been for the minority of its pupils. It had concerned itself largely with those pupils who were going to college. Its success was measured in terms of the progress its pupils made in their college work. This was natural because it was a tangible and objective means of evaluation which administrators could use in dealing with the public, and it satisfied the only parents who made much effort to measure the success of the school—those whose children were going, or planning to go, to college. Consequently, the teachers judged their work by these same standards. It was found that forty-two per cent of the pupils were dropping out of school before graduation and that less than fifty per cent of those remaining were attending college. Obviously, by planning in terms of college attendance, the school was not meeting the needs of the majority of its pupils. In response to this realization some classes were set up with the purpose of meeting the needs of individual pupils. The work of one of these classes will be described in this report.

There were twenty-three tenth grade pupils, twelve boys and eleven girls, in the class whose work is to be described. The range in their rankings on the Progressive Achievement Test (Tiegs, Ernest W., and Clark, W. W., California Test Bureau) was from 10.2 to 6.4. This test makes provision for translating test scores into grade placements in terms of subject matter mastery. The mean grade placement was 8.0. The mean I. Q. was 101.5, the range was from 83 to 119. The oldest child was 17 years, the youngest 14 years 5 months, and the average age was 15 years four months.

The school program had apparently failed to meet the needs of these pupils, since it had not enabled the majority of them to reach the normal achievement for pupils of their grade, age, and intelligence. The pupils who were far advanced in their scholastic work had had disciplinary difficulties. One pupil had a definite speech defect. Some of the pupils had heavy home responsibilities, and some had jobs before and after school hours.

Few of them had home conditions conducive to good school work. To most of them school was a task which had little relationship to their everyday lives and from which vacation was always welcome.

One purpose of the teacher who worked with this group was to provide a situation in which the pupils could learn to make better adjustments to other people. She hoped that the pupils could see the relationship between things learned in school and the ability to get along with people. She felt that the difficulty experienced by some pupils in their classes was due to their inability to express themselves clearly in oral and written form. She proposed to help them achieve expressional ability.

Another purpose of the teacher was to study each individual in the group and help him discover interests and needs which could serve as a basis for his school work. She hoped to help him make his school experience such that he would find it so interesting and challenging that he would attend because he wanted to do so and not because he was compelled. She felt a definite responsibility for the progress of the pupils relative to formal subject matter, since so many parents and pupils judged by this factor alone; but she believed that this could come along with and through experiences in which pupils were learning to live effectively in a democracy. The provision of such learning experiences was the fundamental purpose the teacher developed as she studied her pupils prior to beginning work with them.

Some of the pupils and the teacher had worked together during the previous school year in a two period course called English-Social-Science. This name was given their tenth grade course, as the pupils had requested a continuation of this work, and the school was accustomed to this terminology. Again this was planned as a two-unit, two-period course, each session to last two and one-half hours. It met the first two periods of the day. In the ninth grade the members of the group had been required to buy the literature book used by all pupils in that grade. This book, Good Companions, by Payne, Neville, and Chapman, published by Rand McNally, was considered usable, since it was organized around social problems, and it served to make the class conform, to some extent, to work which other tenth grade English classes were doing. The need for textbooks was felt because of the attitude of parents and pupils toward an English-social-science class which these pupils had been offered in grade eight; they had come to feel that in classes in which there were no texts, no work was expected. Consequently, parents were asked to cooperate with the teacher and the pupils in choosing materials and in planning the pupils' work. Informal contacts were used for this purpose because of the fear that organized meetings would lead parents to feel that their children were subjects for experimentation, for which some of them had revealed a distaste. This procedure seemed to be successful, for the parents were very cooperative and expressed satisfaction with the year's work.

In the ninth grade each pupil had paid a fee of \$1.50 out of which a grammar drill book, Making Sense, by Salisbury and Leonard, published by Scott Foresman, Young America, a weekly newspaper, and other materials needed from time to time had been purchased. This fee had been agreed upon and the text books selected. Several publishers had sent sample copies of weekly news-summary papers; the pupils were asked to take thsee home, them with their parents, and decide which one the group should take. Because they had several such matters to decide, the class became organized and learned how to conduct business meetings in a fairly satisfactory manner.

In light of their experiences of the previous year the group asked, at their first meeting, for an election of officers and a business meeting, so they could decide "what to do." Those who had not been in the group the previous year said that would be a waste of time, that "you had a teacher to tell you what to do." The pupils justified their request by asking the new pupils if they didn't frequently have to take part in business meetings. Of course, the answer was "yes," as was their answer to the question, "Well, shouldn't you learn how to do it 'right'?" It thus early became evident that the old members of the group were going to have to evaluate their experiences for the "new," and the things they said in so doing proved valuable to the teacher in her efforts to determine the extent to which various procedures had been successful. The group decided to elect officers every six weeks, so that many could have experiences in leadership and "learn how difficult it is to preside when some won't listen and wait to be recognized."

The matter of materials to be bought for the year was left to the group to decide. Here again the new pupils thought that should be a matter for the decision of the teacher. In meeting this opposition the old pupils apparently convinced the new that they had learned more during the previous year when they had been given opportunities to choose their materials than when they had taken assignments from the teacher (They had been given such opportunities gradually as they seemed able to use them). In chosing their materials they first listed the things they thought they should do during the year. These were the things listed:

- 1. Learn to speak correctly;
- 2. Keep up with the news;
- 3. Read for pleasure;
- 4. Learn enough English to be able to do the work in the junior year (Here the teacher discovered a rather vague idea on the part of the pupils as to the nature of English courses. They felt that rules, parts of speech, Shakespeare, etc. constituted English. Efforts were made to secure the cooperation of pupils and teachers in advanced courses in helping them to see English as a means of self-

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expression. The class constantly did its work with this in mind and pointed out definitely the purposes of language, but more must be done along this line.);

- 5. Learn to carry on business meetings;
- 6. Learn to write letters;
- 7. Learn to locate places in the news;
- 8. Understand present-day events;
- 9. Learn to study more effectively;
- 10. Learn to work together—cooperation;
- 11. Learn to work on projects independently.

In light of these purposes the group chose their materials. They decided to buy the literature book. There was not complete agreement on this point, however. Some thought they had not used it enough last year to justify buying it, some thought they could use library books and those on their own shelves, and some did not like the book. Those in favor of purchasing the book thought all should have some materials alike, the other sophomore English classes were using it, and the books were good to keep. No special pressure was used to have pupils purchase the books since opinion was divided, but every person bought one. They decided to set the fee at \$1.25 (they had some money left out of the \$1.50 last year) out of which they bought the grammar drill book Making Sense and the weekly paper, Young America. This left thirty cents per pupil for incidental expenses and materials that were needed for class entertainments and projects. The class subscribed to Reader's Digest, because the library copy was not always available to them; and as the year went on, they developed a desire to read it. The teacher brought her copy and gave references to articles in it, and the need for a class copy soon became evident. The class also bought a small atlas for each member. It was interesting to note how carefully the group watched the use of its money. If the expenditure was only 5c, it was discussed pro and con in business meetings. The school furnished the News Map of the Week, and many free materials were used. For example, the Santa Fe Railroad sent copies of a railroad magazine for each pupil, the Navy Department sent books telling the history of the Navy, and the state agencies in Kentucky sent materials on conservation and other topics. One boy used Boy Scout materials frequently. People in the community sent materials. For example, one parent visited the group and heard a pupil express the need for material on a certain country; she sent magazines and pictures on the topic. One woman in the community sent her copies of Consumer's Digest. As pupils discussed their needs with each other and their parents and teachers, materials were sent in. The pupils learned to look for materials and discovered many sources. In fact, the reading table was always full, and often the pupils and teacher felt that there was too much

material. Neither teacher nor pupils learned to use materials to the best advantage.

The pupils and the teacher worked out a schedule to use as long as it met the needs of the group. It was understood that it could be disregarded at any time by the group or by any pupil if it interfered with the effectiveness of work to be done. It was required by the teacher that individuals not working according to the group schedule plan their work with her at the beginning of the period or during the previous day. The tentative schedule follows.

8:10-8:15—Location of materials and indication of plans to teacher by pupils who intended to work independently. (The room was open at 8:00, and pupils frequently came early to study, listen to radio programs, or plan with the teacher.)

8:15-8:30-Radio news broadcast

8:45- 9:15—Free reading period or work on topic being studied by the group

9:15- 9:20—Rest period (by entire school)

9:20- 9:50—Study on grammar exercises and discussion of questions presented by the group

9:50-10:20—Reading from literature book or weekly newspaper and discussion of these materials (One day each week a business meeting was held at this time.)

10:20-10:30-Planning of next day's work

This schedule was almost never followed in respect to exact time limits. Often the discussion of the news would require the entire first hour. Frequently, dealing with errors in oral and written reports, which formed the basis of the grammar exercises, would require a whole hour; this became increasingly true as pupils became desirous of improving their speech. As pupils gradually became more able to plan their own work, planning periods had to be lengthened. At the beginning of the second semester a new schedule was adopted.

Each pupil kept a folder in which he put a record of his work. It contained a progress sheet showing his errors in writing, and materials which he wanted to save or which the teacher required. The pupil used this folder in finding his own grade at the end of each term. Keeping the folder up to date was made the pupil's own responsibility. Some drill exercises, papers, and reports were required to be in the folder, but it was principally designed as a way for pupils to keep up with their materials and records—a service file for the individual pupil's use. Many pupils did not use the folders advantageously. The teacher felt that she should have placed more emphasis upon correcting errors in a few papers than upon keeping of all papers for purposes of grades.

During September the pupils became interested in the aurora borealis. which appeared unusually bright. Some of them did quite a bit of reading about these lights and from that became interested in the moon and stars. They made oral reports to the class. They discovered that the biology teacher had done some research along this line, so they invited him to meet with the class at his convenience and seemed to appreciate the three or four class sessions he spent with them. In evaluating this experience they expressed the view that they had profited from his visit more by having read and studied in preparation for it. This study of questions which arose in the experiences of pupils formed the basis of most of the year's work. In talking with pupils both in and out of school the teacher watched constantly for interests which they seemed to manifest so as to give them aid in selecting projects for individual and group work.

The teacher had administrative duties which frequently kept her out of the room at the beginning of the period. She tried to develop a spirit within the group which would encourage the members to plan their work so they could take pride in being started when the teacher arrived. Soon they discovered that if they were working on well-planned projects, they could go right to work without waste of time and receive the consequent approval of the teacher. Those who were working on individual projects had to wait for neither the group nor the teacher to begin their work and thus could accomplish more. Very early in the year some pupils began to present these facts at business meetings in an effort to convince the group that all members should work independently. Some pupils were never able to work without direct guidance from the teacher. Two pupils seemed to make no progress and disturbed the group unless the teacher prevented.

The teacher and the pupils expressed the belief that planning for this beginning period each day had taught them the value of definite preparation for work. A visitor from a neighboring school pointed out the extent to which these pupils helped each other locate materials and forward their projects. She thought this spirit of cooperation was most unusual. Both pupils and teacher recognized that definite planning on the part of the pupils was the secret of "really getting work done." If pupils misbehaved, they often said, "It was because I didn't have my work planned for today." The teacher thought this was evidence of the fact that some pupils were reaching their goal of learning how to study.

Each morning the class listened to a news broadcast. Sometimes the pupils wrote a list of the names mentioned, sometimes a list of places, and sometimes a list of the most important events. The third list was designed to help the pupils develop a sense of values. Often they disagreed over the importance of news items. This led to discussions which helped them learn to express themselves, respect the opinions of others, and present bases for their opinions. Frequently at the beginning of the year the pupils would

say, "I think so, but I don't know why." Very seldom was this heard at the end of the year. The pupils seemed to enjoy seeing who could get the longest list of names and places; making these lists was suggested by the teacher because in the discussion period following the news pupils would frequently want to ask questions and couldn't remember the name or place to which they wanted to refer. Listening to this broadcast seemed to encourage pupils to listen at other times, for frequently they reported things other commentators had said and came to school early in the morning and at noon to to hear the radio. Some pupils were not interested in the news, however, and came early to listen to music. They were encouraged to "feel at home" in their room. Some took advantage of this freedom and had to be punished.

The News Map of the Week was used by the pupils in earning "extra credit." Grades were given all pupils at the end of each six-weeks period; and often, when it came time for grades, the pupils in this group were not at a point in their projects where meaningful grades could be assigned. Consequently, the pupils and teacher used these written reports on the news as evidence for grades. A pupil could prepare as many as he chose. He must go over each one with the teacher and correct all errors in the report or receive no credit for it. Thus, in addition to enabling pupils to improve their grades, these supplementary reports helped them to keep up with significant news events, to learn to prepare correct papers, and to see the necessity for making adjustments to meet group requirements. The teacher felt that these reports not only served the purposes mentioned above, but also gave an opportunity to pupils to increase confidence in themselves by earning higher grades. This provided at least one situation in which pupils could see that effort alone paid. No pupil received low grades if he earned enough "extra credit." This work was often done before and after school and during spare time when some pupils were ahead of group activity.

Early in the year a film committee was appointed. This committee studied the catalogue of the University of Kentucky film service which was available to the school and selected films from time to time which were suitable for the work. They had to arrange for getting the picture machine from another school. The boy in the group who undertook the showing of the films changed from a serious disciplinary problem last year to an "A" citizen and pupil this year. It was not known exactly what brought about the change, but the teacher felt that being the "picture man" gave him a feeling of importance which he needed.

In the news the term "morale" was used often. The pupils had a hard time understanding the term and the value of morale to the armed forces. It seemed to the teacher that they had grasped the meaning when they decided to help build morale by writing letters to one teacher who had entered the service. They said this would help them learn to write letters, too.

Their grammar reference book helped them with the form of their letters. The group decided to have a Hallowe'en party, and the girls planned to surprise the boys by making plans for it. Since many of the boys had early paper routes, the girls decided to have a breakfast of doughnuts and cocoa, and tell ghost stories, and play games. The party didn't work out well. At the business meeting following it, at which an evaluation discussion of the party was held, the boys said they thought the reason it had failed was their unwillingness to cooperate. The girls admitted they had made a poor choice of a story to tell and hadn't prepared it well enough. The boys wanted to "make it up" to the girls by giving the Christmas party, which they did with real success. The pupils and the teacher felt that working on the parties gave real learning experiences in cooperation.

During September and October the pupils wanted to work as a group and leaned upon the teacher for assignments. Of course they held their own business meetings, led their own discussions following the news broadcast, and worked on some questions of interest to them to which reference has been made. The teacher used the literature text, the Making Sense drill book, and the Young America paper but gave the pupils the choice concerning the parts of these materials to be used and repeatedly asked for suggestions concerning methods of use. Usually these suggestions were tried, unless the group deemed them not workable, as a means of encourageing pupils to make their own decisions. Whenever a pupil discovered an interest which he was desirous of pursuing, he was encouraged to leave the group work for that purpose. During these two moths experience was gained in writing summaries and synopses, themes, and letters. Emphasis was placed on learning how to collect material from several sources, as the teacher found the pupils deficient in this type of work. Mystery stories in the literature book were used as a basis for the synopses, and news and travel stories as bases for the summaries. The group also studied figures of speech and used "picturesque speech" in the Reader's Digest throughout the year in reviewing the figures. They seemed to look forward to each issue to see if they could find examples of the figures. Some of the pupils became interested in poetry through this study.

During November the pupils decided that, since they had learned that they remembered what they summarized, it would be a good idea for them to write summaries of the lessons which were giving them the most trouble. This activity was encouraged by the teacher, because it helped the pupils to see that the purpose of this English course was to help them express themselves whenever they needed to do so. Pupils found this practice helpful. It also enabled the teacher to do some cooperative work with the other teachers who were working with this group of pupils.

In December the boys in the class became interested in producing a play. This interest came about through the reading of a comedy assigned by the

teacher, the production of which would require some unusual stage arrangements such as lighting. The boys thought they could build the necessary equipment and surprise the girls. They worked some on the scenery and the assignment of parts, but the boy who had the lead and had been the moving spirit in the enterprise returned to his county school, which had been repaired after a fire, and-then came Pearl Harbor. The frequent references to the Japanese ambassadors and Brutus suggested the reading of Julius Caesar. Some pupils hated the thought of Shakespeare because they "had gotten so tired of him in grade seven," but the boys were interested in a play, and they liked the synopsis of Julius Caesar and what some other sophomores had said about it; so the group decided to assign parts and read the play. They invited the Latin teacher to come to the class and discuss Rome in Caesar's day and explain the various titles in the play. attempt was made to do more than enjoy this play, because of the previous ideas of the pupils about Shakespeare. Some enjoyed the play and wanted to read more, but some did not understand it. Reading the play revealed the need for giving some pupils experiences in oral reading. "We need some oral reading" was frequently given as a reason for wanting to read a story aloud after this play was read. The teacher and the pupils felt that the chief values derived from reading the play were the demonstration that reading plays could be a pleasure and the realization that people today are are facing some of the same problems faced in Caesar's time. Historical references seemed a little more real to the pupils after the reading of Julius Caesar. Many pupils, however, did not overcome the dislike of Shakespeare, which they had acquired earlier.

The group requested that some questions be given them as a basis for study for examinations. Some of them who had left the group at times to pursue a project of their own were afraid they couldn't do much with a formal examination such as the rest of the classes in school were having. They couldn't see how their work could fit into the usual examination scheme of the school. They seemed afraid that the examination would not give them a chance to show what they had learned—they mentioned such things as presiding over meetings, working together, locating materials, and making their own decisions. They finally decided to help the teacher list some facts all had learned, make review questions on these, and base the examination on them. This was done. The pupils and the teacher recognized the examination as something more or less apart from the work; the real evaluation was the check-up by the group on the individual and group projects and the frequent discussions concerning "what we are learning and what we can do better."

Early in the second semester it seemed wise to work on individual problems. Up to this time some had already worked individually, but the group in general had stuck to its belief that all the members should work as a group. The decision to work independently was made by the group in a business meeting in which the pupils agreed that they had learned enough about how to study to be able to work by themselves. The majority of the pupils had definite ideas about what they wanted to study at this meeting. In the reading, class discussions, radio broadcasts, and picture shows they had found interests which they wanted to pursue further. The teacher agreed to make assignments for any pupils who desired to work in this manner. Only one pupil followed this plan. He was absent so frequently that he hadn't learned to locate interests and materials as well as the other pupils.

At this meeting an interesting development was noted by the teacher. The pupils seemed to feel a responsibility for seeing that each pupil was satisfied about the plan for work. At the beginning of the year a majority vote had been the major concern of the group; now it was the welfare of the individual. The group needed help from the teacher in working out a program flexible enough to satisfy each person's needs, but the attitude displayed as the work progressed indicated that they had succeeded in doing so. The pupils showed interest, self-confidence, and energy as they went about their work, and seemed to get pleasure out of doing it. Only two pupils needed to be "started" to work frequently. The teacher usually found when she entered the room notes on the board indicating the places where pupils had gone to work or pupils working at their projects.

Each pupil made a plan sheet in which he outlined the following items:

What I plan to study;

Why I chose this problem;

Materials I shall need;

Places I shall need to work:

Help I shall need from others;

Form of report to the group I plan to make.

They worked out the following schedule with the understanding that it could be adjusted to any individual needs:

8:10-8:15-Indication of plan of work to teacher and preparation of materials for work. (Many pupils came before 8:10 for this purpose and to listen to early broadcasts.)

8:15- 8:30-News via radio

8:30-9:00-Discussion of news

9:00-10:30-Work on projects

Frequently pupils used the first period for work on their projects if it suited their needs better. For example, those who needed to work in the shop with the help of the teacher could go there only during the first period. The pupils and the teacher made arrangements with the other teachers for

their help and gave the librarian information concerning the projects so she could help secure materials. It was necessary for some pupils to write letters for materials. This gave some practice in writing business letters. Most of the pupils were taking typing, so the typing teacher helped them frequently with this part of their work. She also helped those who prepared written reports by letting these reports serve as the material for their typing lessons:

One boy made an elaborate coin collection. He wanted to become an Eagle Scout and frequently asked the teacher to help him with Scouting problems. In this project he had to write business letters to order coins, make a case for and mount them, and learn to locate the countries in which they were used. In discussing what study he should undertake with the teacher he indicated that he was busy with this Scout work. The teacher suggested that he undertake this as his class project. He seemed delighted, and without aid from the teacher, secured help from the shop teacher in making his case, the art teacher in planning the mounting, and the librarian in locating countries and their coins. This pupil at the suggestion of the teacher secured some books on money, which he read while he was waiting for his mounting to dry or at other odd times. Since he frequently brought items about money to the class and the teacher, she had reason to believe that he might have developed an enduring interest. Later in the year he left the group work to pursue another Scouting project—metal indentification. This time he suggested the project, followed somewhat the same procedure he had followed in the first one, and gave an excellent report with very little aid from the teacher. Incidentally, he did become an Eagle Scout during the summer, an unusual achievement for a boy of fifteen. His rankings on the Progressive Achievement Test of 10.2 at the beginning and 13.8 at the end of the year indicate that he had acquired more than a normal amount of formal subject matter in the study of his projects. In addition he solved, partially at least, another of his problems, for he made real friends among the teachers and the pupils as he worked with them on his report and shared his display with them. Up to this time he had experienced difficulty in getting along with people. After his first report the group elected him to a responsible office, secretary of the Victory Club, and showed a sympathetic attitude toward things he did and an increased respect for his ability. They looked forward to his second project report, frequently asking him when it would be ready.

Another boy, who had become very much interested in electricity as he read about the aurora borealis in the fall, read a book on the atom. He made no written report but told the pupils the most interesting things he had learned in reading the book and answered their questions concerning it. The teacher encouraged him in his desire to make only an oral report, because he experienced difficulty in speaking correctly. He displayed

quite an unusual knowledge of electricity and was encouraged to continue his reading. His next project was a written report on aviation training schools, but he continued to read and study electricity and was quite the hero when the "General Electric House of Magic" came to school. In answering questions relative to this and other electrical problems, this boy developed quite a bit of poise and improved his speech. He was elected chairman of the group for one six-weeks period, although he was a "new" member, and learned to conduct meetings. He didn't like the meetings very much, however, as they disturbed his reading. He was given permission to go to the library during them if he had no responsibility and desired to do so. He left the meeting only once. A substitute teacher reported that he took the responsibility of making her feel at home in the group. He received a promotion in his position at the "A and P" store. Apparently, he was overcoming some of the timidity which had handicapped him. His rankings on the Progressive Achievement Test showed that he made more than twice the normal year's progress in subject matter.

Two boys read that Government would ask for model airplanes. They wanted to be ready to build them, so they tried to buy a solid model so they could get experience in reading blueprints and construction. They were unable to get a plane, so they got a boat. One boy did most of the work. In making his report he stated that the most important thing he had learned was to be careful of the people with whom you choose to work. He didn't undertake any more joint projects. The better worker among the two boys did a fine project on railroads. On the reading table he found a magazine published by the Santa Fe Road which said he might have more information about railroad history by writing for it. He did so, received some pictures, read the history back of them, and made a study of railroads. The other boy began a study of Kentucky, but was taken ill before he finished and did not attend school regularly the rest of the year.

One boy who liked to hunt and fish visited the State Game and Fish Commission for information concerning the date of the hunting seasons and decided to make a report and a scrapbook concerning unusual animals in Kentucky. Several pupils studied places and people in the news, and some read novels. One group of five girls decided to read Silas Marner because some of their friends in other classes were having to read it. They concluded that they had made a poor choice of a project.

As the work progressed, periods for sharing "troubles and triumphs" were given. It was very interesting to see how members of the group helped each other find materials and put them together. It was agreed that each should make some kind of report to the group; he could determine the kind. These reports took various forms. One boy who was studying Pearl Harbor found that a man in the community had a picture film made there. His report was to secure this man and his film and present them to the class. This was considered a real achievement by the teacher, because up to this time the boy had been unwilling to approach strangers and speak before the group. The experience in making appointments and plans with this man, a lawyer, making arrangements for showing the picture, and conducting the class session at which it was shown gave this boy confidence in himself which improved his later work.

Many of the reports were merely written themes; those who wrote themes displayed them and their illustrations and answered questions on their topics presented by the group. Because the pupils needed this experience of presenting material to the group and of being responsible for answering questions and leading a discussion, an effort was made not to be too critical. In making his report each pupil told how he had worked and what he hoped to do better next time. He asked for suggestions for improvement from the group; this method was not definitely planned; it just "grew up" as the first reports were made. Each pupil made arrangements with the group for time for his report. Every attempt was made to let pupils realize that the purpose of his project was not merely to report to the class—to recite. The report was made entirely secondary to his learning something he could enjoy or use. The teacher felt that these projects had great value in helping pupils get meaning from what they read. Previously she had noted their tendency to write, or copy, material without understanding its meaning.

Just about the time that most of these projects were finished the Young America paper began the organization of Victory Clubs. This group organized one. Also the principals and the superintendent of the Frankfort Schools set up certain patriotic songs and documents each pupil should know. The class looked over the list and decided it should learn these documents as the first Victory Club project. Meanwhile, they had invited the civilian defense coordinator to a class meeting and offered their services in any capacity in which they were needed. February and March and part of April were spent learning The Star Spangled Banner, America, "The Preamble," The Bill of Rights, The Pledge to the Flag, The American's Creed, and The Gettysburg Address. During this time the group was doing its news summaries, studying the articles in Young America, and carrying on daily grammar drills, which will be explained later. Some were working on projects, too; but most of the group could not handle much more than the news and the memory work. This memory work they did because "it was up to them" as Victory Club members, as the chairman expressed it, not because they wanted to; but many pupils did enjoy it, especially when the music teacher and one woman in the community gave them some help with the music. Quite a bit of musical talent was discovered in the group. One of the boys secured the records of Ballard for America. This and the music stimulated some interest in reading poetry, and some pupils did a good deal of such reading.

Because of some remarks by people in the community, the faculty considered a "better speech campaign" in which different classes would select an error common in our school on which the entire school would work for a week. In this group volunteers served each day as a committee to plan the drill on the errors. Some committees had written drills, some oral. One girl who had become interested in music and poetry wrote a poem which she asked the group to complete by filling in blanks with the correct forms of words. The school paper published the poem. During and after these drills, the pupils corrected themselves and each other more often than before. One boy had been afraid we weren't learning enough "English" because he hadn't been made to learn rules and parts of speech as he had done in the eight previous years. He was still saying, "I had came," "He didn't have no," and using many other incorrect forms. The pupils reminded him that he hadn't corrected his speech in eight years of rule study they were not unkind about it: they just wanted to correct their speech errors, instead of merely memorizing rules. He became much interested in the drills and began to get a new concept of English study.

In April the class undertook the study of the Constitution and the meaning of democracy. The American Legion Auxiliary had heard about some of the work of this class; so they sent some booklets, One Hundred Questions on the Constitution, which the group used as a basis of its study. The superintendent had bought some books, Our Freedom, which the group borrowed. One member of the group had been expelled from school partly because he insisted to the principal that "this was a free country and he could laugh when he pleased." The group was greatly concerned about this; the boy was well liked and had been a good member of the class. One girl said, "It isn't all our fault, but I guess we haven't given him the right idea of democracy." The meaning of democracy was stressed in the study of the Constitution and in the other class activities.

The Victory Clubs throuthout the country were trying to raise money for an ambulance to be sent to General MacArthur. If each club sent \$1.00 the ambulance could be bought, and the British and American Corps had agreed to deliver it. The group decided to conduct a penny campaign in the whole school, and each member—there were two to a homeroom assumed the responsibility of presenting the matter to a homeroom. The group worked diligently in planning and practicing the presentation speeches. They raised \$11,00 and had some good experience in organizing a campaign and speaking before strange groups.

During the previous year the English-social-science class had made a trip to Louisville to see the radio station of WHAS, the airport Bowman Field, the newspaper plant of The Courier Journal, a Coca-Cola bottling plant, and the army air base which was under construction. Early in the next school year this class appointed committees to study the possibilities of another trip. One committee worked out an itinerary, but they couldn't secure transportation. The group thought it was the fault of the committee and asked another to serve. They succeeded in getting the cars and the necessary permission, but meanwhile the Government had requested that no trips should be made which were not necessary. After much discussion, the group decided not to go. The teacher used no pressure for the decision, and she felt that the group decision proved that the pupils had learned a valuable lesson in their study of democracy since they were willing to give up, for the common good, a pleasant experience for which they had planned and worked.

Some of the pupils heard that achievement tests were to be given in the school and thought the group should review the parts of speech, case, number, etc. in preparation for them. Some time was spent in these drills—newspaper headlines and news items were frequently analyzed grammatically. However, those who had projects which they thought were more valuable than the review, worked on them. As usual, if a pupil did not keep busy, the teacher gave him work to do.

Our school had never had an English-social-science class for the juniors. At a business meeting in May the group decided they would send a committee to the principal to request that such a class be offered for them. The group instructed the committee to present the following reasons for the request:

We believe we can learn more things this way;

We like to combine learning and fun;

We can learn more useful things this way;

We are used to studying this way and may not be able to do straight English in the junior class;

We believe Americans need to know about running a democracy and we get a chance to learn in this class;

We like the class;

We like to work together.

We have projects we haven't completed;

We can understand the war and present-day events when we study this way;

We don't want to be bossed around by teachers;

We like to choose what we will study;

We like to decide things for ourselves;

We like to be on our own;

We want a chance to take trips and things and not have to just sit and read all the time;

I can't pass junior English (The boy who said this had been absent nearly two-thirds of the time, and therefore, passed none of his sophomore work.); We get more experience planning and doing things.

At this meeting no formal attempt on the part of the pupils was made to check their year's achievements in terms of the purposes which they had set up at the beginning of the year. This will be the first work done by the group as it plans its work this fall. Such evaluation was done at the end of each unit of work. The teacher noted their remarks at this meeting and studied their folders, their activities, and their conduct and felt that the following conclusions were justified regarding the extent to which the group had achieved its purposes.

The daily grammar drills and the discussions following the news broadcasts had been the most effective means of learning to speak more nearly correctly. Pupils and teacher noticed a consciousness of correctness in form and a desire to learn to speak correctly which had not been present at the beginning of the year. Presenting the penny campaign to the other classes and the various committee visits to administrators and townspeople were helpful experiences in self-expression, as were the project reports and the activities in the class business meeting.

The teacher noted a great improvement in the ability to write letters. Many pupils who had not liked to write at the beginning of the year asked to write letters with the help of the teacher.

Pupils reported to the teacher that they had "to show their home rooms how to conduct business meetings," which indicated that they had made progress in the direction of this goal. The teacher and the pupils noted great improvement in the conduct at the meetings. It was interesting to note how an experience in serving as chairman improved the conduct of the pupil as he returned to his place as a participant in the meeting. The group tried to solve a problem by selecting the most troublesome member as chairman. It didn't work! He did improve for a time, but the teacher could see that his troubles were so deep-rooted that he couldn't solve them by just wanting to improve. He told her that he had been "behind" since he was in the fourth grade and had about decided he couldn't "catch up."

Most of the pupils made progress toward their goal of learning to work independently and cooperatively as their decision to work increasingly in that manner toward the end of the year indicated. Descriptions of the projects in this paper point to this conclusion, although three pupils seemed to make little or no progress in this direction.

Pupils and teacher felt that one of the most valuable learning experiences of the year was that relative to understanding present-day events. Pupils frequently told the teacher how they had taken part in discussions in other classes and at home. She tried to make them see how their knowledge was helping them adjust themselves to other people. Toward the end of the year the teacher often remarked to her family and friends that they needed the pupils in this class to help them keep up with affairs. In learning to

take the time to trace an event to its origin, locate materials, and fix facts definitely in their minds the members of the group felt that they had also made progress in learning how to study. The teacher felt that many pupils had made progress in this direction, but she also felt that the pupils, with three or four exceptions, had much to learn in the development of real study habits.

It is interesting to note that, in setting up the reasons they should continue their class next year, which in the teacher's mind constituted an evaluation of the year's work with a real pupil-purpose, the pupils mentioned not only the purposes which they had set up, but also those which the teacher had formulated but not presented formally to the group.

Some pupils said, "We believe Americans need to know about running a democracy, and we get a chance to learn that in this class." The teacher felt that this was an indication that she had made some progress toward her goal of teaching pupils to learn to live effectively in a democracy. Their increased consideration for each other and willingness to take responsibility for the good of the group were also indications in this direction. At least three pupils seemed to the teacher and their classmates to make little or no progress in learning to work with others.

The statements of some pupils regarding their belief that the class gave them opportunities to "choose what we will study," "decide things for ourselves," "learn more useful things," "to be on our own," "get more experience in planning and doing things" led the teacher to the belief that the pupils had accomplished something toward her purpose of providing experiences which were real and challenging for them.

The teacher felt that one goal which had not been set up specifically either by her or the pupils was reached to an extent worth noting here. The pupils, in evaluating their work, developed a willingness to admit and profit by their errors that will serve them well in improving their ability to get along with other teachers and pupils. When the boys, without pressure, admitted that the Hallowe'en party had failed because they hadn't cooperated, the teacher became more hopeful for their progress. Toward the end of the year it was not uncommon to hear remarks like that of one pupil, who hadn't completed a project, to the effect that she "hadn't chosen a topic wisely" because she had done so "without much thought." Her conclusion was, "I'll know better next time." Perhaps one factor that contributed to the development of this attitude was the practice of making out their own grades which the pupils followed at the request of the teacher. As they studied their folders and progress sheets, they became increasingly conscious of the fact that pay doesn't come without work. One boy said as he handed in his grade, "I can't figure any thing but 'E' (failure), but want a D. I wish you would just give me a grade without my having to figure what I have and haven't (mostly haven't) done." Apparently, this

pupil had received some grades which he considered gifts; facing facts was a new experience for him.

The average rankings of the group on the Progressive Achievement Test of 8.0 at the beginning and 9.17 at the end of the year indicated normal growth in subject matter, but the teacher and the pupils felt that this was secondary in value to the experiences in democratic living which they had enjoyed. Not all of them were pleasant, by any means, and both pupils and teacher recognized many mistakes they had made and opportunities they had missed. Many times during the year the teacher felt that very little was being accomplished. She and the pupils regretted that they had not kept more accurate records. However, the decision of the class to continue the work next year and to carry on part of it during the summer indicated that they had found their ways of working profitable.

The summer work which the group decided to carry on was that of their Victory Club. They made plans to do this at their last business meeting and at a picnic which they had at the close of school. The teacher was to be away during the summer, so it was necessary to get adult leadership for the club. The chairman made contacts with several persons and finally decided to work with the chairman of the Junior Red Cross. She corresponded with the teacher and reported that some members had Victory Gardens. At the time of this writing the success or failure of the summer's work is not known, but the fact that pupils wanted to continue their class work during the summer indicated to the teacher that the goal of making school more interesting and challenging for them had at least partially been reached.

II. School Notes

Schools of the Southern Association Study are encouraged to write out from time to time brief notes of work under way. This material has appeared frequently in news letters issued by the Study. Recent notes from two of the schools participating in the Southern Study-Lee H. Edwards High School, Asheville, North Carolina, and Highland Park High School, Dallas, Texas—are included in this issue. In both cases the effect of the war on schools is clearly discernible.

> Notes from Lee H. Edwards High School Asheville, North Carolina, 1943 /

By L. N. CONNOR Principal

Commercial Department

No extra courses have been added in the commerical department in connection with the war effort. However, we have correlated topics with secretarial subjects, such as, "Army and Navy Correspondence," and "Civil Service Examinations."

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Distributive Education

The distributive education program has assumed an active wartime significance as evidenced by a more than normal increase in the number of students placed from 1941-42 to 1942-43.

Reasons for the increased need of students by stores could be attributed to (a) loss of employees to the armed forces, and (b) loss of employees to governmental jobs. This last reason became more acute when one large government unit was moved to Asheville and two military units were located in and near Asheville. These units were the Postal Accounts Division of the Treasury Department, the Safety Wing of the Flight Command, and the Moore General Hospital. All of these units drew heavily on the personnel of local stores. The number of students placed as salespeople jumped from thirteen to thirty-four in one year. The number of students placed in variety stores almost doubled. Other placements which showed an increase were in specialty shops, drug stores, theatres, and newspaper circulation departments. Specialty shops usually employ a very high type salesperson because of the specialized clientele which they serve. Many of these people were able to secure immediate work. Personnel of drug stores, theatres, and newspaper circulation departments consisted mainly of those who were of draft age and unmarried, and hence had to leave immediately.

Another phase of the distributive education program is the in-training for store personnel offered at hours convenient to the people concerned. The enrollment was 304 for the year. Instructors were drawn from the large list of capable store executives who lent their support and cooperation.

A successful program is based on the cooperation of all concerned. The teachers in the high school have cooperated fully in the endeavors of the program, giving extra time and effort in helping students who were asked to do extra work and giving many valuable suggestions regarding the abilities of students. The administration of the school has been most cooperative in approving the work and supporting it to a conclusion. The Asheville merchants have given their unstinted support in making the program worthwhile in every respect.

In addition to the endeavors of the distributive education program listed above, many part-time and full-time placements of students were made during the year as a service to the high school, to the students, and to the community.

Dramatics

The classes in dramatics and creative English have written fifty-seven original plays and produced four of them. They have written forty-three radio scripts on rationing, price control, and rent control for use by the OPA. Ten of these scripts have been sent from state headquarters to Atlanta for regional use and may be used in a national program of OPA next year.

A list of the titles of these scripts follows:

- "Butter Fingers," Matilda Roberts
- "Who Is An American," Betty Lou Morgan
- "The Farmer Goes To Town," Faela Mae Robinson
- "Home, Sweet Home," Jimmy Lipe
- "No Beef Today," Emily Mashburn
- "One Little Pig Went To Market," Billy Livingston
- "What, No Shoes?," Margaret Jean Taylor
- "The Price of Meat," Margaret Daniels
- "The Rarest Stamp," Jane Perry
- "For the Children," Emily Mashburn
- "Number 17," Gerry Carter
- "Keeping Up With The Joneses," Sally Hopkins
- "All the King's Horses," Charles Tennent
- "The Laundry Man's Liver," Emily Mashburn
- "Canned or Fresh," Jean Brooks
- "Ruth Goes Calling," Margie Brener
- "Vienna Sausage," John Bridges
- "Ladies, Please," Rosemary Hipps
- "To The Point," Bob Collins
- "Another Man's Family," Allene Hancock
- "Hitler's First Aide," Jack Taylor
- "There Ought To Be A Law," George Young
- "A Dog's Life," Betty Jo Blanton
- "A Woman's Weapon," Andrew Trumbo
- "Cousin Isabelle," Nancy Blanton
- "The Butler Goes To Market," Marilyn Budgen
- "Come and Bring Your Ration Book," Nell Morgan
- "Play Ball With Uncle Sam," Frances Tucker
- "Shut My Mouth," Barbara Warren
- "The Bus or Else," Ned Whitmire
- "My Kingdom for a House," Gordon Cathey
- "Looking Up," Gordon Cathey
- "Black Isn't Popular This Season," Mary Lloyd Brown
- "A Touch of Frost Bite," Billy Morgan
- "Food for Thought," Dabney Adams
- "A Rendezvous on an 'A' Card," Barbara Stafford
- "George's Last Letter," Judy James
- "Melodrama in the Market," Mae Belle Enman, and Billy Livingston
- "Pity the Poor Grocer," Colleen Ingram
- "Sugar is Sweet," Emily Mashburn
- "What, We Wear Shoes?" Peggy Hyder

In the past two weeks these classes have written twenty-six fifteen-minute radio scripts for a 13-week continuity program on conservation. These deal with the Savemore Family and point out more than 200 ways to conserve our present possessions, thus strengthening the Home Front. These have been requested by the local rationing board for whom the classes have been working for the past six weeks. A local newspaper took notice as follows: "The dramatic arts class of Lee Edwards high school stands to receive regional if not national attention for its work in writing fifty-eight radio scripts on price control, rent control, and rationing which were sent to the State OPA office at Raleigh for possible use."

In a letter to Miss Elizabeth Welch, teacher of the class, the OPA state information officer at Raleigh, wrote in part:

"Your children certainly did a magnificent job of getting the facts of price control, rent control and rationing in dramatic form. I have made a copy of your letter to me and sent it throughout North Carolina and throughout the region of eight southern states so that other teachers of dramatic arts could go and do likewise. . . .

"I am going to Atlanta this week end and shall take numbers of the scripts with me so that all of the regional and state people can actually see what your children have done . . . At the conference in Atlanta, the Washington officials will also be present and I shall present to them what you have done. . . .

"I shall use these scripts with my community service members and clubs throughout North Carolina, giving, of course, full credit to you and the students who wrote the scripts.

"I hope to be able to get some kind of a special recognition for your students after talking it over with my regional director in Atlanta this week end, so you can tell them that there will be some kind of recognition for the fine work hat they have done.

"Please express my deepest appreciation to every member of your class and tell them that I feel that they have 'rung the bell' for all dramatic art students in this country."

Although members of the class have had practice in dramatic writing, these were the first radio scripts they ever turned out.

Home Economics Department

In the home economics department, the war has changed our teaching in several ways. Perhaps foremost is the stress we are placing on nutrition and better eating habits for the students. For one period the nutrition work alternates with physical education. There is one class in advanced nutrition that comes every day. During Nutrition Week for Asheville and Buncombe County, the home economics department stressed the idea of a

"Victory Lunch"—that, is a lunch measuring up to the national nutrition vardstick. Lunches were actually checked by the students.

The use of the sugarless recipes in foods work and the preparation of meatless meals along with the conserving of all essential food stuffs are emphasized. Care of electrical equipment as well as clothing is also stressed, as these are all essential war materials.

Sometimes our work is of the intangible kind. It may carry over to the homes of our students to the ultimate end that it may make physically fit some one for duty that might otherwise not be fit.

Mathematics Department

This year we have attempted to make the mathematics classes fit into the defense program and feel that we have accomplished much along this line.

We have acquired two new sextants with which we are able to measure angles to determine altitudes, thus enabling us to make our own practical problems in trigonometry. In connection with this we use the army mil system to measure distances to objects. We were fortunate in having an army officer lecture to us on the use of the mil system, at which time he explained the method of sighting between first and second knuckles to determine the number of mils. This method is used in the Army for rapid calculation. We have used this method in many ways and found it not only very interesting, but accurate enough in sighting planes, etc.

We have made three surveying transits with which the students have learned the fundamentals of surveying, finding latitudes, departures, degree of error, etc. As the students were required to draw plats to scale and to calculate areas, they learned more practical application of their trigonometry than they would have learned otherwise. An officer in the first World War. hearing of our endeavors, contributed a pocket transit which he had used in the engineering forces. This proved very valuable to us as we were able to double-check our work. By these means the students have spent at least half of their class work out of doors doing practical work. As a result, our boys who have completed the course are finding army work much easier and receiving promotions more readily than they otherwise would have.

Although we have had to build for ourselves most of our equipment, the results obtained compare very favorably with standard transits, sextants, periscopes, etc.

Advanced algebra has been extended from one semester to a full year's work with much time given to graphs and fractions. We require all advanced algebra students to take trigonometry the second semester. A number of students who had finished plane trigonometry decided to continue into spherical trigonometry. Not having time for a regular class period, these boys completed the spherical trigonometry alone as a research project, coming to the instructor for assistance only when they came across something they could not master alone. These boys have done such a good piece of work that they have been used as student-teacher helpers. Not only have they assisted with the slower students, but they have supervised the field work. A member of the high school faculty, realizing that he would soon be inducted, has been reporting to a trigonometry class every day, and is being assisted at odd times by one of the students. He reports that this review is helping him wonderfully.

The classes studied navigation both by water and by air. A former student, at home for a few days from the Army Air Corps, spent a week with the class teaching the students the fundamentals of flying and the mathematics necessary for the training. In connection with this, the group is studying the celestial sphere as well as the terrestrial.

The mathematics department is receiving greater attention than ever before. The enrollment in this department has tripled, and the quality of work is at a much higher level. Interest is shown both by students and faculty. The students are interested, alert, and eager to learn, taking advantage of every opportunity to ask worthwhile questions and entering whole-heartedly into the discussions.

Social Studies

In an effort to give the students a better opportunity to keep informed relative to the problems and developments throughout the world today, special courses have been introduced. These include a study of Latin-American relations, a course in international relations, and one in current affairs.

All social-studies classes are making an unusual effort to emphasize those things which will aid the student in understanding the problems which confront us in the war emergency and which will confront us in the post war world.

> Notes from Highland Park High School, Dallas, Texas, 1943
> By Ben Wiseman, Principal

I. THE TESTING PROGRAM AT HIGHLAND PARK HIGH SCHOOL

One effect of the pressure of war is the added importance it gives to an adequate testing program, which becomes an invaluable aid in solving many of the problems brought by shifting population, accelerated programs, and the necessity for conserving time and energy and for planning wisely. Highland Park High School has made an attempt to evaluate the various phases of its testing program, to discover areas which should be included, and to strengthen the program wherever possible. An effort has been made to test the student sufficiently that counselors and teachers may supplement the

personal knowledge they have of the student with an objective record and incidentally to give the student sufficiently broad testing experiences that he enters college, military, or industrial life with a familiarity with certain parts of the routine. The tests serve an added purpose now when the school is called upon to advise the student and his parents as to what he should do concerning enlistment and college.

Perhaps the most distinctive thing about the Highland Park testing program has been the way in which it has evolved. The program has not been superimposed from above and then administered by a disinterested faculty. Instead it has grown over the past several years as the school has grown and as additional needs have become apparent. Teachers and counselors have participated in setting up the program, working individually and in committees. Encouraged to broaden their knowledge in the field and to take advantage of opportunities to increase their understanding, they have learned much from the experience. One counselor, for instance, has served as counselor in a community vocational guidance project, involving an extensive testing routine, of the Dallas Civic Federation and is serving this summer as visiting guidance consultant at several of the teachers colleges. Three years ago two members of the counseling and teaching staff were sent to the state university to study progress made by our graduates and to consult authorities in the field of testing on ways of improving our testing program. The director of research of the Texas Commission on Coordination in Education, the State Director of Supervision, various members of the staff of the local university, and others have been helpful in the selection and interpretation of tests.

Before the student enters high school, he takes the Stanford Achievement Test, which together with other facts about the student included in his permanent record helps the counselors place the student in the curriculum where he shows promise of working most effectively. Shortly after enrollment in high school the student takes the Terman-McNemarr Test of Memtal Ability, which also becomes a part of his permanent record and which has proved useful in advising students as to course of study, college planning, etc.

Especially illustrative of the way in which tests have been introduced are the tests given by the English and mathematics departments. Here, tests have served a very definite purpose as teaching tools. Several years ago a very definite need was felt by the English teachers for discovering early in the year the general nature of each class, those individuals requiring special attention, and those topics demanding increased emphasis. Accordingly, "diagnostic" tests were introduced. These tests were prepared by the teachers working together, and the results were studied in group meetings. They were useful in determining what should be studied during the term as well as in determining which students should be taken out of the

regular classes and placed in special groups where added time could be devoted to supplementing inadequate foundations and where progress could be made at a pace within the abilities of the students. Counselors found the tests helpful also in advising students as to choice of college. Achievement tests at the end of the year were also introduced and provided a definite means of evaluating work done.

Two years ago it was decided that national standardized tests would be of added usefulness and interest in that they would enable teachers and counselors to evaluate work through comparisons with national norms. The experience of preparing their own tests and analyzing the results was a constructive introduction to the standardized tests. After consultation and study it was decided to use as a diagnostic test at the beginning of each year the Essentials of English Test of the Educational Test Bureau. It was also decided to use in addition to the check-up or achievement tests given at the close of each term the series of three tests—Mechanics of Expression, Effectiveness of Expression, and Reading Comprehension—of the American Council of Education. These tests are now given to all students completing the eleventh grade. The annual diagnostic tests provide a cumulative record of the student's progress; the eleventh grade test not only checks on achievement but also indicates work to be emphasized during the student's last year in high school.

In addition to the diagnostic and achievement tests the English teachers have given tests designed to discover reading deficiencies. Through the regular classes students are given brief reading tests prepared at the school in an effort to discover probable weaknesses. Students falling below certain standards are then selected for further consideration. The remedial reading teacher administers to this group the Iowa Silent Reading Test. On the basis of this test small remedial reading groups are organized. In many cases after a few weeks' individual attention these students are able much more effectively to do regular work. The remedial reading teacher has an added opportunity for discovering reading deficiencies through her work in the study hall organized this year for transferring students as one means of helping them become more quickly and effectively oriented. Working with this group each day, she is able to observe study habits and offer assistance where it seems needed.

The history of the mathematics diagnostic test is similar to that of the English test. The test was introduced as a means of detecting weaknesses and of stimulating greater accuracy—in other words, as one means of meeting the demand for better training in mathematics and science. Constructed by the mathematics and science teachers, the test involves the fundamental arithmetical processes. I has been helpful in discovering the reason behind the difficulty many students have in the advanced science and mathematics courses. As a result of the tests, special sections in mathematics

matics have been set up to meet the needs of those students whose further progress is blocked by basic weaknesses which may be corrected by special drill. The teachers who have prepared and used the tests are now able more intelligently to select and interpret a standardized test. Such a test will be used next year with the added advantage of national norms as bases of comparison.

After exploratory work through individual testing last year, the testing program has now been extended to include vocational tests. The Strong Vocational Interest Tests, which have, incidentally, proved of greater usefulness among the boys than among the girls, have been given to all seniors and have served as a basis for personal interviews with the students. Recently the Kuder Preference Record was introduced among the younger students.

It is recognized, of course, that no single test has great significance. It is believed, however, that the cumulative record for each student, including diagnostic, achievement, mental ability, scholastic aptitude, English, reading, and arithmetic scores, together with scholastic records, vocational interest scores, attendance records, and health records, provides at least a basis for an individual study of the child.

The testing program is still in process of evolving, and a study is now being made of means of meeting various additional needs. Properly selected and administered prognostic tests, for instance, might eliminate needless failures in mathematics and science and language by students who should have enrolled in different courses. Contemporary affairs tests might contribute to a keener interest in and a greater awareness of what is happening now and might also encourage a different emphasis in class work. Standardized testing might profitably be extended to social studies and science. Strengthening and improving the testing program and making increasingly constructive use of it continues to be an objective of the Highland Park staff.

2. WAR WORK IN HIGHLAND PARK HIGH SCHOOL

As have most schools, Highland Park High School has supplemented its usual peacetime activities with an intense program aimed at helping in every way possible to win the war. In the first place, changes in the curriculum have been made in order to give boys planning to enter the armed services training in such subjects as pre-flight aeronautics, electricity, radio, and higher mathematics. Pre-flight aeronautics is the only strictly new course offered, but courses of study in physics and mathematics have been so rearranged as to give more time to those subjects requested by the army, navy, and air forces.

Every pupil in school, unless his doctor requested otherwise, was required to participate in some way in the physical fitness program. More attention has been given to eye and ear tests, to acquainting the pupil with the im-

portance of a study of nutrition, and to a mental health program. The standard First Aid course has been given to every student in school.

It is in the extra-curricular field, however, that the war work has been most noticeable. Through the Student Council a Victory Corps was organized somewhat along the lines suggested by the War and Navy Departments and the National Education Association. Instead of being organized by the faculty, however, the Victory Corps here came from the students, with each step being taken as the students on the central planning committee felt that particular step to be necessary. The General Division of the Corps concentrated on assisting the Student Council with the sale of stamps and bonds. The Air Division met regularly during the activity period for the purpose of studying radio code and navigation. Members of this division conducted such interesting excursions as a tour of the Fifth Ferry Command headquarters nearby. Members of the Production Division supplemented the vocational work done at the school by polling the students to determine who would be available for jobs after school and during the summer. A card index was prepared showing the qualifications, preference, and experience of each pupil who was interested. The information gathered found an additional immediate use in facilitating the preparation of the educational experience summaries requested by the Office of Education and the Manpower Commission. Publicity on this project led to many calls from business men, farmers, and other prospective employers, and to the placement of many students in jobs.

The activities of the Community Service Division were so varied and so numberous that they deserve separate treatment. Under the sponsorship of the Hi-Lites, an organization open to all girls in school, members of this division assisted the Red Cross, U.S.O., and Civilian Defense Offices in many of their projects. Many girls took special training courses so that they might qualify as Nurses' Aids, Day Nursery assistants, Hospital Aids, and other aids of similar importance. The entire membership of this group devoted much time to such things as making kits for visiting nurses, decorations for U.S.O. dances, gifts for parties at nearby army camps, and other things designed to keep morale high among the armed forces.

Two honorary organizations of the school, the National Honor Society and Quill and Scroll, jointly undertook two projects for the benefit of the school—the collection of material for a complete ex-students' file and the collection of a memorial fund for those of our graduates who have given their lives in the services.

The entire school system joined the Student Council in the biggest project of all—the steady, day-by-day buying of war stamps and bonds. By various campaigns, contests, and steady buying the pupils of the Highland Park schools purchased enough stamps and bond; this year, even since April 12, to purchase a bomber. Sales have reached \$275,000. Under

the Schools at War program the students will be permitted to name the bomber, "The Highlander," the name chosen by the students.

The students have also assisted generously in the Red Cross collections, the scrap metal and rubber drives, the hosiery collection drive, and in war relief drives of various kinds. The school has been and is definitely "warminded."

3. PARENT ORGANIZATIONS AS FACTORS IN BUILDING COMMUNITY RELATIONS

In addition to contributing to the school community in many concrete ways, the two organizations of parents at Highland Park High School have been of invaluable service in providing a medium through which sound community relations might be established. In monthly meetings and committee work parents and teachers have found opportunities for cooperative work which has done much to establish increased mutual understanding. The practice of inviting outsiders to present the programs for the meetings has been largely replaced by having members of the school-both teachers and students-participate. Parents have been enthusiastic in accepting this opportunity of becoming more directly acquainted with the various phases of school life. Many problems are avoided and others are intelligently solved through the understanding and interest growing out of the parent-teacher organizations.

The organization of mothers and teachers with the customary objective of bringing "parents and teachers into a closer relationship so that they may cooperated more intelligently in the education of the children" has contributed much to the well-being of the school. The PTA has made its chief concern the efficient functioning of the school lunchroom, a non-profit concern where the emphasis has always been placed on providing the students and teachers a wholesome, well-prepared meal served at nimimum cost. The cashiers and supervisors of the lunchroom are members of the PTA who volunteer their services for a regular bi-monthly assignment. The cafeteria project, then, has resulted not only in a very successful lunchroom but also in a personal interest in the school which can come only with actual work and service.

An annual gift of \$500 to \$750 to the library for the purchase of new books has become a tradition with the Parent-Teacher Association. Numerous other school activities are supported with grants of money, volunteer service. or entertainment. Membership in the association averages 350 mothers and teachers. The monthly programs are devoted largely to activities of the school, and most of the performers are students chosen to display their musical, forensic, dramatic, or athletic prowess. Pupil directed panels keep the mothers informed of school affairs.

A distinctive phase of the Highland Park school community is the work of the Dads' Club, which boasts of being the largest in the world with an average membership for the past five years of 1,200. Founded in 1932 by a group of fathers of high school football players, the Dads' Club has broadened its membership and interests in the past eleven years to include fathers of all students in the five Highland Park schools and to support school interests of all kinds—scholastic, musical, military, athletic. The "dads" meet monthly, witness student talent programs, and decide on the allocation of funds. Among the benefactions for the high school has been a substantial gift to the library earmarked for books of special interest to high school girls. During the past two years the club has sponsored a scholarship improvement award for students improving their scholastic average measurably from one semester to the next. The ROTC unit, girls' and boys' athletics, musical organizations, and school publications are among the school groups which have enjoyed the active interest of the "dads."

In short, the Dads' Club lives for the function of finding a need of the pupils of the Park Cities schools, diagnosing that need, and fulfilling it as quickly as possible. Thus the members activate their goals of "fostering and encouraging jointly with school officials an incentive for high scholastic achievements and the civic responsibilities of the pupils" as well as "being of every possible service for the general welfare of all pupils."

4. An Orientation Program at Highland Park High School

Organized at the beginning of the year as one means of helping new students solve their problems, the study hall set up especially for them has proved one of the most helpful and constructive devices used this year. The comparatively high failing percentage among transfers has for some time been recognized as an indication not only of varying backgrounds but also of maladjustment. The Hi-Lites and Hi-Y's, organizations respectively for girls and boys, have done much to bring new students at once into the life of the school; and the counselors have done much to help. It was decided, however, that with the number of transferring students increasing each term additional effort should be made in helping them make successful adjustments. The first period of the day was accordingly set aside as a study period for new students where questions could be asked freely; where school routine, customs, and traditions could be studied; where students having various difficulties could be helped or directed to the proper counselor or teacher; and where through association with others facing similar problems the students could lose any feeling of strangeness and aloneness. The most significant results, perhaps, are of an intangible nature difficult to evaluate. The fact that the failing percentage for new students is now lower than it has ever been is, however, concrete evidence that the project has been worthwhile.

There were seventy-odd students in the study hall. Helping them was

a teacher who is also a member of the counseling staff and who is especially interested in girls' activities. During part of the time a second teacher, one who is especially interested in remedial reading, also met with the group, observed study habits, and worked with individuals needing special assistance. To familiarize the newcomers with the school building, small groups of boys and girls were sent over the building with guides from the Student Council. To familiarize them with school activities, school officers representing the Council, the various clubs, the publications, the cheer leaders, and a representative from the PTA made informal talks and invited the students to participate in those activities in which they were interested. Open forums were held after each talk so that all questions might be answered. Copies of the school handbook were read and discussed. The librarian conducted a tour of the library. So that a maximum number of students might know the library more thoroughly, class librarians responsible for securing material desired by their classmates were named periodically.

In accordance with a practice established some years ago, each new student took home at the end of each week a scholastic report from each teacher. A study of these reports enabled the study hall teacher to keep close check on students, to direct those needing help to their counselor, and often to correct situations before they became very difficult. Telephone and personal conferences with parents revealed significant facts enabling teachers and counselors to be more helpful. Pupils needing guidance-scholastic, social, vocational, college planning-were sent to appropriate counselors. At the end of ten days an open forum was held for questions, suggestions, and comments. The school newspaper featured a story on "Orchids to Our Old School and to Highland Park." Each new student turned in a sheet indicating what he liked best about Highland Park and what he missed most from his old school. The statements were interesting, usually significant, and often helpful.

Considerable attention was devoted to planning courses of study for succeeding terms. Before the end of the term the principal interviewed the new students to discover any particular difficulty in time to solve it before examinations. Troubles seemed to be at a minimum, but individuals worried for one reason or another were helped and some potential problems were eliminated.

Sauthern association of colleges and secondary schools of colleges and secondary schools of the southern states Editorial Notes

Forty-eighth Annual Meeting
November 29-December 3, 1943, Peabody Hotel
Memphis, Tennessee*

The Forty-eighth Annual Meeting of the Southern Association is scheduled for Memphis, Tennessee, November 29-December 3, 1943. The Peabody has been chosen as the headquarters hotel.

Reference is made to page 442 of the QUARTERLY for August, 1942, for other hotels convenient to the meeting places, all of which will be in the Peabody.

The History of Mary Baldwin College, 1842-1942

Mary Baldwin College, Staunton, Virginia, has joined the list of Southern colleges that have undertaken seriously the task of preserving their early history. In a volume of 629 pages, Dr. Mary Watters, Research Professor in History at the College, has undertaken to tell and document the story of the College from its beginnings as Augusta Female Seminary in 1842. Her book, History of Mary Baldwin College 1842-1942, is commended to the study of all Southern colleges that have not yet undertaken to preserve the story of their development. As the Quarterly has pointed out several times, there are valuable source materials dealing with the development of education in the South that unless used soon will not be available to educational and social historians of the future. Every school and college that uses these materials and writes its history now is making a valuable contribution to Southern history.

Minimum Mathematics for Army Inductees

• The following note is of interest to secondary schools desiring to offer a special course to meet minimum mathematical needs of Army inductees:

"A committee of the National Council of Teachers of Mathematics with the cooperation of the Civilian Pre-Induction Training Branch, Industrial Personnel Division, Army Service Forces, and the U. S. Office of Education, plans to publish early in the fall a report concerning the minimum mathematics required of all Army inductees, except illiterates, in the thirteen weeks of basic training. The statement will rereport an investigation based upon consultations with over two hun-

^{*} The Executive Committee will meet early in September to consider post-poning the Annual Meeting. If postponement is agreed upon, member schools and colleges will be notified by mail.—Editor.

dred Army officers serving as instructors in basic training and upon observation of soldiers at work in many training centers. It will define for teachers of mathematics, principals, and superintendents the mathematics needed by enlisted men doing the least specialized work in the Army. The report will not consider mathematics on a higher level for enlisted men serving as specialists and for officer candidates, but will deal in considerable detail with the elementary mathematics of a special one-year course proposed by a previous committee.* Until the new report is available, programs of study for such special courses may be constructed upon the basis of the earlier report. It is expected that the new report will be published rather widely, and copies may be obtained by writing to the Civilian Pre-Induction Training Branch, Industrial Personnel Division, A.S.F., Room 4C-538, Pentagon Bldg., Washington, D. C.

"The members of the committee are: Virgil S. Mallory, Montclair (N.J.) Teachers College, Chairman; Roland R. Smith, Public School, Springfield, Mass.; C. Louis Thiele, Public School Detroit, Mich.; F. Lynwood Wren, George Peabody College for Teachers, Nashville, Tenn.; for the Civilian Pre-Induction Training Branch, William A. Brownell, Duke University, consultant; and Wells Harrington."

"Some Phases of the Work in Southern Association Study Schools"

We are glad to present in this issue of the QUARTERLY additional evidence of the work being done in the Southern Association Study. Congratulations to Chairman Hoke, Director Jenkins, Secretary Parker, and all their colleagues.

"War-Time Activities of Southern Association Members"

Secretary Jenkins of the Commission on Secondary Education has compiled some of the material dealing with the war efforts of schools to which reference was made in the May QUARTERLY. Many of the school people were too busy with their extra war efforts to write them up, and others were slow in doing so. Both Dr. Jenkins and the QUARTERLY hope that all of this material may appear in an early issue.

^{*}Published in the April 1, 1943 issue of Education for Victory, in the April 1943 issue of the Bulletin of Secondary School Principals, and in the March 1943 issue of the Mathematics Teacher.

